God is Human:

Understanding Human Uniqueness in an Evolving World

Matthew Allen Newland

A Thesis

in

The Department

of

Philosophy

Presented in Partial Fulfillment of the Requirements
for the Degree of Master of Arts (Philosophy) at
Concordia University
Montreal, Quebec, Canada

March 2008

Your file Votre référence
ISBN: 978-0-494-40826-1
Our file Notre référence
ISBN: 978-0-494-40826-1

Abstract

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This work defends the understanding that Homo sapiens is a unique species, bearing an ontological distinction that makes it different from other species of animal life. However, challenges from contemporary biology and evolutionary theory may offer us reasons to either abandon the idea of human uniqueness entirely, or else revise our understanding of what human beings are in light of the presence of intelligent behavior in other animal species. Over the course of five chapters, I attempt to understand human nature through a multidisciplinary investigation. I do this by considering theological understandings and ethical theories in addition to scientific facts, recognizing that the scope of each is up to a point limited to its own universe of discourse. Overlaps between each discipline, however, allow for a broader and more comprehensive understanding of human nature than employing only one discipline will allow. My goal is to provide an understanding of human nature that is limited by neither scientific materialist nor religious fundamentalist perspectives.

Acknowledgements

I must first thank God for making this thesis possible. I think of where I would be without my mind and abilities, a childhood interest in evolution, an interest in philosophy and theology as a young adult, and my wife and son. My family has provided me with the motivation to succeed, while my varied interests allowed me to enjoy an enthusiasm that kept my studies in this subject both enjoyable and exciting. Without all of these heavenly gifts, I would be nowhere and nothing. Recognizing this, I thank the Lord.

I must next thank my wife, Olesia, and our new little boy, Luka, for their reassurance, and understanding, and support. Not only did Olesia put me through school, but she waited patiently for me as I spent so much of my time either reading or typing in the basement of our home. I think especially of the way it was at the very end, in the last days of February and the first days of March, when I was working longer hours than ever. I wrote this thesis for the two of you, whether what I wrote about is of any interest to you, or not. I studied for you, I wrote for you, and I will work for you when my studies are finished. Though for many hours and days I wasn't there, it was all so we could have a better future, together. Please remember this. And thank you.

I must next thank Dr. Justin E. H. Smith, whose mandatory seminar on *Species* during my first year of graduate studies pointed me in the direction that led me to this thesis. I remember my attempts to opt out of the class before the term began, because it was scheduled to conflict with a theology course I was desperate to take. I am truly glad that things worked out as they did (*Deo gratias*), because I am certain that no other thesis topic would have excited me more. If not for Dr. Smith's class, none of *this* would ever have happened.

Thanks must also go to Dr. Matthias Fritsch, who refused to make the change in spite of my protests. Now, I appreciate it. Thank you!

I need to thank Dr. Paul Allen for allowing me to continue pursuing the question of human uniqueness through his class on *Theological Anthropology and Interpreting Evolution*. It was a true blessing that Dr. Allen's class should begin immediately following the conclusion of Dr. Smith's, for it allowed me to consider the question of human uniqueness for both semesters of my first year of graduate studies. Dr. Allen also acted as my thesis advisor, and so I am grateful to him for all his help, ideas, suggestions, criticisms, and arguments. Thank you, Dr. Allen.

I must also thank Dr. Christopher Gray for a long and productive conversation I shared with him last August regarding my work. He had a number of useful suggestions, and his questions helped me to clarify exactly what it was I intended to say. Dr. Gray has shown me a tremendous amount of kindness ever since my arrival at Concordia (including offering me a tutorial of the material covered in the class I missed because of Dr. Smith's *Species* seminar), and I have yet to find a way to demonstrate my appreciation. For everything, Dr. Gray, I thank you.

I must also thank Maxime Allard, o.p., of the Dominican University College in Ottawa. He was instrumental in my return to school after a long absence, answering all my questions about enrollment, approving my application, and providing me with a countless number of interesting, entertaining (and bewildering) conversations once I had arrived in Ottawa. It all seems so long ago, now, but he is undeniably the most important person in my academic life, because he started it all. Thank you, Fr. Maxime.

Introduction.

I.1. The Questions to be Considered. The following thesis was written to address two questions. The first of them is whether or not human beings are unique from other forms of life in the world, possessing a "higher" kind of existence. The second question is how human beings are unique, if they possess a different sort of existence from other forms of animal life. Religious people, especially those of Judeo-Christian backgrounds, have always understood human beings to have been "uniquely created" by God. These views understand human beings to have been made in the image of God, as the book of Genesis tells us. These faiths also tell us that human beings participate in the divine life of God in a way no other living creature is capable.

For human beings, it seems that human life in its present state is very different from the lives of other non-human animals, for a number of reasons. The intelligence of human beings distinguishes them, for example, and for many thinkers testifies to their resemblance to God. Yet other curious traits seem to set human beings apart from the rest of Creation as well. As the theologian Karl Barth once remarked, "What a pity that none of these apologists considers it worthy of mention that man is apparently the only being accustomed to laugh and smoke!"[1]

Unfortunately, science has begun to challenge many of our reasons for understanding human beings to be unique. By identifying humans as *Homo sapiens*, a species of hominid among many other now extinct species, science has forced us to recognize the "animal nature of human beings".[2] Evolutionary epistemologists have come to the understanding that the process of evolution is responsible not only for the

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[1] Barth, Karl. Church Dogmatics. III/2. (Edinburgh: T.& T.Clark, 1960). 82.

[2] *By this I mean Homo sapiens' existence as both a kind of mammal and as a kind of ape, descended from and related to other species of apes.*

existence of the species *Homo sapiens*, but also for the development of the species' intelligence, culture, and behavioral traits.[3] Because of this, asserting that *Homo sapiens* bears any kind of divine nature or beginning becomes more difficult.

Since intelligence, the development of language and artwork, and even drug abuse can be explained through evolutionary processes,[4] then why should we believe *Homo sapiens* to be anything more than its animal ancestors and relatives? This thesis was written with the purpose of addressing these challenges. It was also written in order to find a way to continue to assert theological understandings of human nature, even in the light of contemporary scientific understandings.

I.2. A Multidisciplinary Investigation. In order to justify the idea of human uniqueness in the face of biological science, I shall embrace a multidisciplinary understanding of human nature. What this means is that I shall recognize that different disciplines of study will have particular ways of investigating human nature, and will as a result find different answers to the question of what human beings are. Rather than "deify" one domain of inquiry over another, I will instead recognize that each discipline must be understood as separate but as equally valid as any other in its conclusions. While some disciplines, such as science and ethics, and ethics and theology, may actually overlap and up to a point share the same understanding, each will possess an understanding that cannot be overruled or entirely replicated by the understandings of any other subject.

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[3] van Huyssteen, J. Wentzel. Duet or Duel: Theology and Science in a Postmodern World. (Harrisburg: Trinity, 1998). 143-145.
[4] Diamond, Jared. The Third Chimpanzee: The Evolution and Future of the Human Animal. (1993; New York: Harper Perennial, 1993). 202-203.

Before I begin, I wish to say a few words about how the disciplines I consider shall be selected. I shall make the claim that science and theology stand as equally valid yet separate ways of understanding the world. Because I do this, I will likely face challenges from individuals who would place science before all other domains of inquiry. Consider the following quotation from Tom Regan, taken from his essay on animal rights:

> "Many people evidently believe that theological differences separate humans from other animals. God, they say, has given us immortal souls. Our earthly life is not our only life. Beyond the grave there is eternal life – for some, heaven, for others, hell. Other animals. Alas, have no soul, in this view, and therefore have no life after death either. That, it might be claimed, is the morally relevant difference between them and us. [... However,] the theology just sketched (*very* crudely) is not the only one competing for our informed assent, and some of the others (most notably, religions from the East and those of many Native American peoples) do ascribe soul and an afterlife to animals. So before one could reasonably use this alleged theological difference between humans and other animals as a morally relevant difference, one would have to defend one's theological views against theological competitors."[5]

Regan forces us to recognize the sheer number of theological understandings of human life in order to question the validity of the one he summarized.

However, theology is not alone in this; other disciplines, including science, hold within them rivaling theories and understandings about nature which at times conflict, even while being supported by the same evidence. Consider now the following incident discussed by biologist Tim White, regarding the difficulty of interpreting paleontological discoveries:

> "In the early 1900s, thousands of fossils from the western badlands flooded America's museums. Among them were the oreodonts – medium-sized pig

[5] Regan, Tom. "Ill-gotten Gains." The Great Ape Project: Equality Beyond Humanity, eds. Paola Cavalieri and Peter Singer. (New York: St. Martin's Press, 1993). 197-198.

> relatives from 33.7 to 23.8 million years ago. Paleontologists named a multitude of oreodont species and inferred an adaptive radiation from the 'diversity' they created. [...] The early systematic exuberance of oreodont paleontologists is a textbook example of postmortem deformation driving the creation of invalid fossil taxa. Distorted oreodont crania were selected as type specimens for [separate species, depending on their flatness or narrowness]. But the fossils had been flattened and narrowed by geological deformation, not natural selection. Typological systematics had combined with postmortem distortion to create a diversity that proved chimeric."[6]

It is White's purpose to show that scientific evidence is ultimately subject to human interpretation, which may lead to conflicting theories or mistaken understandings, even within the same discipline.

J. Wentzel van Huyssteen, an evolutionary epistemologist whose thought shall prove to be pivotal to this thesis, goes even further with the bold suggestion that both theology and science are equally products of cultural evolution. For van Huyssteen, the cultural context in which an individual was raised determines both the scientific and religious ways he or she will come to understand the world. Therefore, what is rational for an individual to believe will depend largely on the cultural context in which that individual was raised and educated.[7] What follows from this is that some theologies and some scientific understandings shall always seem more rational than others, depending on any person's cultural understanding of the world.

I shall now offer an example of what is meant by this. The Yolgnu, a group of Aboriginal Australians, have developed in their culture a very different way of

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[6] White, Tim. "Early Hominids: Diversity or Distortion?" *Science* 299 (5615, 28 March, 2003). 1994-1997.

[7] van Huyssteen, J. Wentzel. Duet or Duel: Theology and Science in a Postmodern World. (Harrisburg: Trinity, 1998). 158-160.

understanding the physical world.[8] In the following passage, science historian Margaret Wertheim tells us that though the Yolgnu insist that their knowledge is based on logic,

> "if Yolgnu knowledge is based around logic, it is of a definitively different sort to the Western variety. In our science, the logical underpinning is provided by numbers. Physicists, and to varying degrees scientists from other disciplines, attempt to explain the world using the language of mathematics. The Yolgnu system derives not from the symbolic use of numbers but from kinship. The name they give this kinship-based logic is *gurrutu*. [...] The parallel with maths is quite explicit. At the root of mathematics are the ten numbers, which traditionally arose from the naming of our fingers. In gurrutu, the basic elements named are not the fingers but the relationships between three generations of a family. To understand this, consider the family group of a husband and wife, their four parents and their eight grandparents.
>
> What is named is not the family places per se, but the relationships between them. [...] Altogether there are 16 relationships named in reciprocal pairs. And these form the basic elements of gurrutu. Since what is named is always a relationship between two people which points from one of them to the other, the elements of gurrutu could be seen in a sense as vectors. The system thus constitutes a network, or mesh, of relationships. [...] And just as scientists can use the language of mathematics to talk about things as diverse as the dance of the planets and the form of a leaf, so the Yolgnu can name everything in the world through the logical language of gurrutu."[9]

This non-Western system, as a result, rests on a different set of symbolic elements, yet possesses its own rational and unique logic that allows for a consistent and reasonable explanation of the world.[10]

As a consequence of this fact, it is possible to do more than accept the existence of conflicting theories within a single scientific discipline, based on the same pieces of physical evidence. It is possible and defensible to go even further, and recognize the existence and validity of as many possible scientific systems as theological systems.

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[8] Wertheim, Margaret. "The Odd Couple." *The Sciences* (March/April 1999). 42.
[9] Wertheim, Margaret. "The Way of Logic." *New Scientist* (2 December, 1995). 38.
[10] *Wertheim's article goes on to explain how these personal relationships extend to places and even other nations of people.* (Ibid., 38)

This means that Tom Regan could just as validly question the use of Western scientific methods in the study of animal nature, as he does the use of Western theology. Therefore, the cultural milieu of the multidisciplinarian determines the points of view he or she shall employ in order to investigate any object of study.

I.3. A Personal Perspective. Having been myself raised in both North America and a Roman Catholic family, I have been brought up in a particular cultural context. As a result of this, I have been culturally conditioned to understand the world, and interpret my experiences in it, in a particular way. I understand both the world and my place in it from a Catholic perspective which has forced me to attempt to understand scientific and theological knowledge in the light of my faith. As a result, neither the understanding of nature described by scientific materialism, nor a fundamentalist religious perspective, offer satisfying explanations of the world. Either seems incomplete when considered alone. To accept one but reject the other also seems irrational to me, in light of the fact that neither science nor theology seems equipped on its own to explain all of the phenomena of the world, or all of my experiences in it.

As a result of these personal facts, I shall address the question of human uniqueness from a Western, and specifically Christian, point of view. I do not consider myself qualified to explore the question from any other cultural perspective, for I lack sufficient exposure to the ways and beliefs of any other culture. Therefore, because I understand Western science and theology, I shall make use of both in order to answer the questions posed at the beginning of this introduction.

It should be noted, however, that it is in fact the views of Western science that seem to pose a challenge to the understanding of human nature held by Western theology. After all, Charles Darwin himself was an Englishman, and so was educated in a Western, Christian culture. As a result, my cultural restrictions should not interfere with my attempt to show the validity of the Judeo-Christian understanding of human uniqueness, while still accepting the theories of contemporary science.

Chapter One: Understanding the Meaning of Humanity.

The purpose of this chapter shall be to examine briefly both classical and contemporary understandings of what it means to be a human being. This shall be done so that we might recognize the broad number of reasons why human beings are believed to be be unique. These understandings come from a number of different disciplines, and each understanding may as a result be very different from the others it is offered alongside. In other words, thinkers who consider the subject of human uniqueness often assert that humans are special for different reasons. Unfortunately, this raises the question of determining which understanding of human uniqueness is the most significant. In the sections to follow, different conceptions of human nature will be described, and the relationships of these conceptions will be considered. The question of the best way to understand human uniqueness will be considered, and in the conclusion that way will be briefly summarized.

1.1. Aristotle: A Classical Conception of Human Nature. Traditionally, human nature has been understood in terms of Aristotle's conception, an understanding that continues to have life and influence through its incorporation into Thomism, and by extension, Roman Catholic theology. This section shall briefly explore Aristotle's understanding of humanity, noting both his recognition of its animal nature, as well as the aspects which distinguish it from other forms of animal life.

Aristotle wrote that non-human animals "live by perceptions and memories and have little experience; but the human kind live also by art and reasonings".[11] As a

[11] MacIntyre, Alasdair. Dependant Rational Animals. (Chicago: Open Court, 1998). 5.

believer in *teleology*, the idea that everything in the cosmos acts toward attaining a particular goal, Aristotle believed that human beings were no exception. Humanity's goal, Aristotle claimed, was a politically organized society, for such a society afforded a state's citizens the best lives possible.[12]

Aristotle understood that human beings had to be recognized by the possession of attributes that allowed for a political life and social existence, and so was lead to conclude that speech was a necessary aspect of political and social life.[13] Speech not only distinguished human beings from other animals, but it allowed for the discussion of such topics as justice and morality, key aspects of life in a political state. In order to be able to speak of such abstract concepts, a human animal would have to be rational, or able to think of goods and goals beyond those that would immediately satisfy the passions of the animal body the human being possessed.[14]

To be a human being, in Aristotle's view, an individual had to use the powers that were unique to human beings in order to attain the goal human life was directed toward. In order to determine what powers these were, a simple comparison between other living things could reveal which capacities were unique to human animals. While plants were able to grow after being nourished, plants were not able to move or perceive their environments, animals were. Therefore, Aristotle understood there to exist a *vegetative soul* present in both plants and animals that gave each the power to live and grow, and an *animal soul* that allowed the organisms possessing it to move and respond to sensations

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[12] Trigg, Roger. Ideas of Human Nature: An Historical Introduction. (New York: Blackwell, 1988). 25. *See Aristotle's Politics, 1252b.*
[13] Ibid., 25-26. *Politics, 1253a*
[14] Ibid., 25-26., *Politics 1253a.*

of pain and pleasure. Human beings, Aristotle observed, also possessed each of these aspects, as their bodies were able to grow and move. However, human beings possessed a third kind of soul that could be produced only in their own kind: the *rational soul*, which allowed human beings to rise above the appetites that motivated the actions of unthinking animals.[15]

Aristotle's understood the the universe to be eternal, without a beginning or end, and never changing.[16] While individuals would grow and pass away, the species of animal living in the world were understood by Aristotle to be definite and everlasting kinds. The occasional mutation or "monstrosity" born to a particular kind of creature signified nothing more than a particular instance of distorted existence, and in no way heralded any sort of evolutionary development. The intended, perfect form of a species could not always be perfectly realized.[17] This, Aristotle believed, was merely a consequence of the world's imperfection.[18] Though individual creatures were born into the world but then died, the kinds of organisms being born would always remain, for each animal existed as it had been intended to exist, in order for nature to pursue its ultimate goal.[19]

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[15] Aristotle, *De Anima.* 414a 29.

[16] van Huyssteen, J. Wentzel. Duet or Duel: Theology and Science in a Postmodern World. (Harrisburg: Trinity, 1998). 43.

[17] Clark, Stephen R. L. "Apes and the Idea of Kindred." The Great Ape Project: Equality Beyond Humanity, eds. Paola Cavalieri and Peter Singer. (New York: St. Martin's Press, 1993). 115. *Clark notes that Aristotle ascribed a degree of imperfections to certain species as well, claiming that seals were "deformed quadrupeds".*

[18] Smith, Justin E. H. "Imagination and the Problem of Heredity in Mechanist Embryology". The Problem of Animal Generation in Early Modern Philosophy, ed. Justin Smith. (New York: Cambridge, 2006), 82-83.

[19] Aristotle, *On Generation and Corruption.*, 338a. *Aristotle describes change in the world to be cyclical, the individual substances within it both one day "coming to be" and presently " already come to be".*

The views of Aristotle, Christianized during the Middle Ages, had a profound effect on the way the people of the Western world came to view themselves and their place in Creation. The understanding that only one species of animal was capable of being human lead to a conception that identified humanity with only one kind of creature. The notion that species were fixed categories in an unchanging universe fit well with the biblical understanding that

> *"God made the wild animals of the earth of every kind, and the cattle of every kind, and everything that creeps upon the ground of every kind. And God saw that it was good."* Genesis 1:25 (NRSV)

If God's Creation was good, then Aristotle's understanding of unchanging kinds made perfect sense. The two ideas seem perfectly consistent.

St. Thomas Aquinas accepted and adopted Aristotle's metaphysics and employed them to support the teachings of Christianity.[20] Through doing this, he ensured the survival of Aristotelian thought, but allowed it to become the official voice of the most powerful body of people in his world.

Aristotle's understanding of the human being as a rational animal would dominate European thought for centuries to come, underlying Western understandings of both cosmology and biology. [21] his authority in scientific matters eroding only with the astronomical discoveries of Galileo in the 1600s, and geological advances of the 1700s. [22]

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[20] Karkkainen, Veli-Matti. The Doctrine of God: A Global Introduction. (Grand Rapids: Baker Academic, 2004). 92.

[21] Bitbol-Hespériés, Annie. "Monsters, Nature, and Generation from the Renaissance to the Early Modern Period: The Emergence of Medical Thought", The Problem of Animal Generation in Early Modern Philosophy, Ed. Justin E.H. Smith. (New York: Cambridge, 2006). 51. *Bitbol-Hespériés's article notes that 16th century physicians continued to recognize Aristotle's vegetative, sensitive, and rational souls determined the development of plants, animals, and human beings.*

[22] Hill, Jonathon. The History of Christian Thought. (Oxford: Lion Hudson, 2003). 145.

Aquinas's theological authority, on the other hand, continued its hold on Roman Catholicism, reinforced by the First Vatican Council and defended by contemporary theologians such as Karl Rahner.[23] As a result, Aristotle's classical understanding of human nature prevails to the present day.

1.2. The Context and Impact of Darwinian Theory. This section notes the advances in science which forced thinkers away from both Aristotelian and traditional Christian understandings of both humanity and the universe. The impact new scientific discoveries and theories had on theistic thinkers shall be noted, together with the rise of understandings of the world that saw no need to invoke God as any kind of cause. Considering these changes shall help us to better understand the new and revised understandings of human nature that were to follow in the nineteenth and twentieth centuries.

Eighteenth century discoveries in geology forced men of science to modify their understandings of the earth, its age, history, and the story of the life inhabiting it. The theories of such scientists as James Hutton and William Smith offered new understandings of the formation of the strata of the earth, painting a picture of a gradually forming and still unfinished world.[24] Natural processes had laid the foundations of the earth, science was learning, and not an instantaneous creation by God; neither was the world God's finished masterpiece. The idea that the world was not made perfectly and timelessly by God, that it was just as subject to change as anything else, directly challenged the Aristotelian understanding that the earth was eternal. It also challenged

[23] Ibid., 298.
[24] Ibid., 239.

literal readings of the Old Testament, which described the world as being only a few thousand years old. The discovery of fossils found embedded in those layers of rock offered a further reason to doubt the bible. While it had once been easy to dismiss the bones of vanished species of creatures as casualties of Noah's flood, such an explanation no longer made sense in light of the fact that the remains of these creatures were being found in many different layers of rock, indicating that they had died at vastly different times. Such discoveries were to cause severe and lasting changes for both the scientific and the religious worlds, forcing either massive revisions of what was to be believed or driving the two completely apart.[25]

The existence of the bones of creatures no longer living forced the development of new theories of natural history, and chief among these were the theories of *catastrophism* and *evolution*. While catastrophists such as Georges Cuvier asserted that the fossils in each layer of rock corresponded with great life-destroying disasters, evolutionists believed a continuous process connected the fossilized bones with the creatures living in modern times, as ancient animals gradually developed into ones more familiar to the eighteenth-century world.[26] Neither of these theories were at the time of their conceptions seen to conflict with religious understandings of the world's creation. Some catastrophists, for example, speculated that each massive extinction presented God with an opportunity to "start fresh" with another act of Creation and a new array of living creatures, thus reconciling the seven-day Creation of the biblical narrative with a corresponding number of cataclysms and new Creations. Nevertheless, accepting either of these new theories would have still forced any Christian of the time to significantly

[25] Ibid., 239.
[26] Ibid., 239.

revise his understanding of the manner through which life came to exist in the world. The theory of evolution in particular appeared to demand the most compromise, especially in light of the implications it had on both human origins and human nature.[27]

The most significant of the evolutionists was Charles Darwin, whose theory of natural selection provided an explanation of how evolution might have occurred, through a mechanism that failed to invoke God as a cause.[28] The idea that random variations alone explained the diversity of life on earth, accumulating slowly over periods of millions of years, was significant for a number of reasons.

First, it distinguished itself from such understandings as those of Aristotle and Aquinas by failing to resort to supernatural agents in order to explain the state of the living world. While Aristotle had included goal-oriented directionality as a motivating factor for all the life in the cosmos, and as Aquinas had understood God to be the ultimate cause of change together with the idea of directionality, Darwin understood natural processes of reproduction and survival to adequately explain the multiplicity of living things in the world.[29]

Second, Darwin understood that the offspring of a creature only *resembles* its parents but is not *exactly* identical to them, and that the offspring of any creature's offspring will itself possess a similar but not identical nature to its own parents. This idea directly challenged the Aristotelian notion of "species essence".[30] Because minor

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[27] Ibid., 240.
[28] Ibid., 240.
[29] Trigg, Roger. Ideas of Human Nature: An Historical Introduction. (New York: Blackwell, 1988). 35.
[30] Ibid., 85-86.

variations distinguish individual creatures of every lineage, there can be understood to be no definitive examples of any particular kind of animal, and thus no essential nature.

Third, connected with the second, Darwinism challenged the biological notion of species divisions. The legendary Oxford debate between Victorian biologist Thomas Huxley and Bishop Samuel Wilberforce was held not because of a perceived conflict between science and religion, but because Bishop Wilberforce was also an ornithologist, and was not prepared to abandon the idea that species groups were fixed classifications.[31]

Fourth and most importantly, Darwinian theory challenged Aristotelian-Thomistic, and other Christian notions of human uniqueness, through the suggestion that human beings arose through the accumulated chance mutations of lower forms of life, and that no supernatural explanation was necessary to explain human existence. One of the results of Darwin's theory was an end to the invocation of God to serve as a valid scientific explanation of natural phenomena and human nature. While even the deists of the Enlightenment had been content to invoke God as the cause of the universe and the source of its order, Darwin showed that a purely natural explanation could be satisfactory.[32]

In short time, men like Thomas Huxley had acknowledged the undeniable resemblance human beings shared with the other great apes and had even accepted the idea that such creatures might in fact be their close relatives. In the eighteenth century, Carl Linnaeus went so far as to include human beings together with other apes in his

[31] Ibid., 89.
[32] Ibid., 90.

taxonomic classifications, dubbing the species "*Homo sapiens*".[33] In the decades to follow, the "animal history" of humanity would begin to reveal itself through fossil discoveries, which would continue for the next two centuries.[34] The nineteenth century discoveries of the *Neandertal* and Java Man (later identified as *Homo erectus*) revealed the existence of creatures very similar to Homo sapiens from over a million years before. Such discoveries offered compelling evidence confirming that other hominids similar to *Homo sapiens* had existed long before what had been previously believed. They also seemed to offered proof that, as Darwin suggested, modern humanity evolved from similar, yet still different, kinds of creatures.[35]

Though neither discovery was enough to present an accurate picture of human descent, as it is now believed that both the *Neandertal* and *Homo erectus* represent separate and extinct hominid lineages, they were together cause enough to assert with confidence that human existence was almost certainly a product of evolution. The existence of these other hominids also demonstrated that human history was far less simple than prevalent religious views of the time had up until then accepted.

More recent discoveries in the field of paleontology have revealed at last a direct line of descent and development for modern human beings from a very different kind of ancestor, going back at least four million years. A path can be clearly traced from the meter-tall primate *Australopithecus afarensis* to later specimens which were of the same genus but of a larger size. The path may be traced from them to African specimens of

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[33] Warne, Kennedy. "Organization Man", *Smithsonian* 38 (2, May 2007). 105-106.
[34] Ruse, Michael. Can a Darwinian Be a Christian?: The Relationship Between Science and Religion. (Cambridge: Cambridge, 2001). 68.
[35] Ibid., 68.

Homo habilis, a user of sophisticated tools, to *Homo erectus*, and finally, one million years ago, to *Homo sapiens*, the modern and most successful species of hominid.[36] Evidence further suggests that the other great apes of today, such as chimpanzees or orang-utans, shared a common ancestor with modern *Homo sapiens* up until five million years ago.[37] Such discoveries have played a role both in answering questions about human history, as well as raising new ones about humanity's identity, in light of its animal ancestry and close relation to animals which continue to survive until the present time.

Because of the undeniably animal nature of *Homo sapiens*, and science's acceptance of Darwin's explanation of how the species came to evolve, *Homo sapiens* cannot be considered to be of a wholly different nature than its other animal relatives. Homo sapiens must, if Darwin was correct, be recognized to be as much a product of evolution as any other species of ape, descended from the same ancestors and bearing a less discontinuous distinction than had traditionally been believed.[38] This seems to sharply contrast the theological understanding that human uniqueness lies in its existence as an *imago Dei* (image of God), an existence granted to no other form of animal life. The Darwinian understanding of human uniqueness presented here may seem too weak to really be meaningful; if human nature has been already possessed by several other different species in the past, and if the physiological aspects necessary to exhibit human life could still yet evolve in other species of animal, then it might be wondered how significantly different *Homo sapiens* is from every other species of animal life.

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[36] Ibid., 69.
[37] Ibid., 69.
[38] Ibid., 79-80.

How we understand human nature becomes important at this point. It is important for us to determine what capacities, attributes, and behaviors are essential for a uniquely human nature. If the species *Homo sapiens* is presently understood to be a human species, then an analysis of what traits and attributes define *Homo sapiens* will present us with an understanding of what it is to be human, a definition that can then be tested on species other than *Homo sapiens*. In order to do this, several contemporary conceptions of human nature shall be briefly considered, so that a satisfactory definition may be determined.

1.3. Contemporary Understandings of Human Nature: Carl Sagan. This section shall examine a purely scientific understanding of human nature, as offered by astronomer and astrochemist Carl Sagan. Sagan's understanding follows the scientific acceptance of Charles Darwin's thought, as it assumes that both the world and human life developed through purely natural processes. Reviewing his understanding is important because, as an atheist, Sagan has no interest in theological conceptions of humanity. As a result, he makes no attempt to understand or describe the species *Homo sapiens* as in any way divine or ontologically distinct from other forms of animal life.

In 1977 Carl Sagan published his famous book, The Dragons of Eden, which attempted to both explain the source of intelligence and the evolution of the brain of *Homo sapiens*. In a section of the book entitled *On Human Nature*, Sagan attempts to specifically define what sets *Homo sapiens* apart from the rest of the animal kingdom, a task which he performs after a careful analysis of the *Homo sapiens* brain, the systems and parts composing it, and what parts it shares in common with other animals.

Understanding capacities for particular kinds of behavior to be rooted in specific areas of the brain, Sagan discusses how behaviors beyond rudimentary survival functions can be traced to either the *limbic brain system*, which the species *Homo sapiens* and all other mammals share with reptiles, or the exclusively mammalian *neocortex*. Following the research of Paul MacLean, Sagan observes how the brain is understood to be layered, with each one of its composing systems stacked on top of another. He presents the idea that as evolutionary processes added new layers to the outside of a species' brains, new functions and behavioral capacities were acquired by the organisms in possession of them.[39]

Sagan tells us of how the brains of vertebrates vary in the number of systems comprising them, depending on the evolutionary complexity of the creatures possessing them. The most primitive vertebrates, fish and amphibians, possess only a rudimentary brain structure called the *neural chassis*, comprised of the top of the spinal cord, the *medulla*, and the *pons*. It allows only for the performance of simple, life-sustaining behaviors such as breathing. [40]

Reptiles, Sagan says, possess a brain comprised of two systems, the first of which is the *neural chassis*, which they share with fish. On top of the neural chassis reptiles possess the *reptilian complex*, which allows for more complicated behaviors (aggressive and territorial behaviors among them).[41]

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[39] Sagan, Carl. The Dragons of Eden: Speculations on the Evolution of Human Intelligence. (New York: Ballantine, 1977). 53.
[40] Ibid., 57.
[41] Ibid., 63.

The number of layers increases with mammals, whose brains are composed of at least two systems in addition to the *neural chassis.* The first of these is the *reptilian complex*, while the second is the *limbic system.* Sagan tells us that the *limbic system* is responsible for generating emotion, as well as basic altruistic behavior.[42]

Higher mammals, such as primates, possess at last the most recently evolved brain system, the *neocortex*, which in Sagan's own words contains "our capacity to be human".[43] He notes, for example, that the temporal lobes of the *neocortex* allow us to understand spoken words, while its frontal lobe allows for the experience of both anticipation and anxiety, and thus an ability to fear the future.[44]

If such an understanding of the brain is correct, Sagan says, then "we should expect the *reptilian complex* to be in some sense performing dinosaur functions still, and the *limbic cortex* to be thinking the thoughts of pumas and ground sloths."[45] However, Sagan notes that as evolution expands both the brain and the systems composing it, the physiology of the original systems is to an extent also altered.[46] He also notes that a number of brain functions come to be shared between more recently evolved parts of the brain and where they were based originally. The olfactory sense is a prime example of this, as Sagan notes that while smells are primarily processed by the brain's *limbic system*, this sense may still take place in the *neocortex*, though to a much lesser extent.[47] He thus notes that in spite of the redundant occurrence of certain capacities, the older

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[42] Ibid., 66-67.
[43] Ibid., 74.
[44] Ibid., 73-75.
[45] Ibid., 62-63.
[46] Ibid., 63.
[47] Ibid., 77.

brain systems underlying the *neocortex* of higher mammals continue to work as they did in the brains of their more primitive ancestors. As a result, the brain can be schematically understood to be comprised of a number of distinct systems each capable of performing different functions, ranging from breathing and growth to abstract reason.

It is interesting to note the similarities between Sagan's presentation of the brain and Aristotle's view of the soul. More specifically, it might be said that the systems of the brain could be understood to be formed different aspects of the Aristotelian soul.[48] To begin, though neither is describing exactly the same object, the function of the *neural chassis* is roughly analogous to Aristotle's vegetative soul, as both allow the creature possessing them to grow and live on the most basic level. As it has been noted already, the *reptilian complex* contains the capacities for aggressive behavior, while both the senses and emotional behavior are rooted in the *limbic system.* The brains of creatures composed by these two systems could be thus understood to exist as a comprised unity that functions very much like Aristotle's sensitive, or animal, soul. Last of all, the *neocortex* of Homo sapiens (and other primates) holds the intellectual and reasoning abilities which Sagan says makes the species uniquely human. This is because, he tells us, the *neocortex* holds inside it the capacity for "all human symbolic language".[49] A parallel to Aristotle, and his idea of the rational soul, can be easily extended to correspond with Sagan's observation. Even though Sagan acknowledges that the lines between brain functions and systems he describes blur, while Aristotle's souls are understood to be distinct, the similarity between the two understandings is undeniable.

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[48] *It should be recognized that Aristotle understood the soul to be not an object, but an arrangement. We must here note, if we recognize the parallel I am pointing out, that each brain system might be understood to be formed by one of each of the three kinds of soul described by Aristotle.*
[49] Ibid., 77.

Sagan's identification of the *neocortex* as the source of human nature opens the door to a number of troubling questions for those who would restrict humanity solely to *Homo sapiens*. The most obvious is the question of whether the possession of a similar *neocortex* gives other animal species similar intellectual abilities to those possessed by *Homo sapiens*, especially if they share a (relatively) recent common ancestor. Considering the fact that both the brains of *Homo sapiens* and other animal species share the same systems and evolutionary history, Sagan shows us that no clear boundaries really separate the two. *Homines sapientes* (the plural form of *Homo sapiens*) are themselves a species of animal, a species which emerged slowly through the same evolutionary processes as every other animal. Thus he understands *Homo sapiens* to be physiologically only as unique as every other distinct animal species on the planet. Sagan is willing to say, however, that the species *Homo sapiens* is notable among all other known forms of animal life because

> "[w]e are the local embodiment of a Cosmos grown to self-awareness. We have begun to contemplate our origins: starstuff pondering the stars; organized assemblages of ten billion billion billion atoms considering the evolution of atoms; tracing the long journey by which, here at least, consciousness arose."[50]

Because the universe becomes aware of itself in the species Homo sapiens, we might understand understand human uniqueness in this way. Thus because intelligence is such a significant development within the universe, and because the species Homo sapiens bears such a high degree of intelligence, the species can be understood in this way to be unique.

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[50] Sagan, Carl. Cosmos. (New York: Ballantine, 1980). 345.

Sagan explicitly states that the sole determiner of human nature is intelligence, and that *Homo sapiens* can possess this particular attribute only with a functioning *neocortex*:

> "The reason we prohibit the killing of human beings must be because of some quality human beings possess, a quality we specially prize, that few or no other organisms on Earth enjoy. It cannot be the ability to feel pain or deep emotions, because that surely extends to many of the animals we gratuitously slaughter. This essential human quality, I believe, can only be our intelligence. If so, the particular sanctity of human life can be identified with the development and functioning of the neocortex."[51]

He makes this statement after considering the issue of abortion, and the question of whether or not embryos of *Homo sapiens* (as well as adult comatose patients) ought to be considered human beings.[52] His conclusion, that only a creature with a properly functioning *neocortex* can be considered human, may prove to be unsatisfying for some if it means denying humanity to unborn *Homo sapiens* or to individuals with mental impairments. Equally controversial is his suggestion that other organisms not of the species *Homo sapiens*, such as whales, dolphins or other apes, might qualify as human if their intelligence can be shown to compare to that of a "somewhat backward but fully developed" *Homo sapiens*.[53] To think any other way would mean to be guilty of what Sagan calls "human chauvinism".[54] This idea thus forces us to consider whether humanity may be possessed by just one particular species of animal, or may instead name a state of being that transcends species boundaries and can be tied to capacities reachable by any creature able to evolve in the proper way.

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[51] Sagan, Carl. The Dragons of Eden: Speculations on the Evolution of Human Intelligence. (New York: Ballantine, 1977). 207.
[52] Ibid., 204-205.
[53] Ibid., 209.
[54] Ibid., 209.

Such a redefinition is undeniably challenging, and may fail to satisfy those who believe *Homo sapiens* is more than just the sum of the physiology and capacities the species acquired through evolution. Because of this, another understanding of human nature shall be considered, one that has little use for scientific explanations.

1.4. Contemporary Understandings of Human Nature: Joseph Ratzinger and Alasdair MacIntyre. In the following section, two other understandings of humanity shall be examined, through a brief summary of the writings of the Roman Catholic theologian Joseph Ratzinger (Pope Benedict XVI) and ethicist Alasdair MacIntyre. This shall be done in order to consider the understandings of human nature found in theology and ethics. While the ultimate understanding of what humanity most fundamentally is could be seen as common to both, each discipline nevertheless offers its own particular understandings underlying its offered perspective. In other words, while an ethical understanding of human nature reaches its conclusions for certain reasons, these reasons will not be the same as those underlying the theological perspective.

In a homily delivered in 1986, Joseph Ratzinger discussed the role of humanity in the world and the aspects that distinguish human nature from the rest of Creation. Ratzinger's understanding that human beings alone are entrusted by God with the responsibility of caring for the earth to serve as its masters is contrasted with his simultaneous acknowledgement that human beings were themselves parts of the earth, made out of its very dust.[55] It was the *breath of God* animating this dust, he says, that allowed human beings to exist as a sort of "contact point" between heaven and earth. As

[55] Ratzinger, Joseph. In the Beginning: A Catholic Understanding of the Story of Creation and the Fall, trans. Boniface Ramsey (Grand Rapids: Eerdmanns. 1995). 43-45.

all human life is so intimately derived from God's and because God's life lives within every human being, Ratzinger says, all human beings are of one family, for all share the same divine soul.[56] Ratzinger asserts that this fact serves as the most foundational reason for protecting human dignity, for each individual human being bears the life of God. Each individual brings into the world through his or her mere existence a unique idea of God, and was brought into existence through the same act of Creation.[57]

Ratzinger observes that the scientific and technical attitudes prevalent in the late twentieth century have given human beings an opportunity to free themselves from the "superstitions and anxiety" that once tormented them.[58] He states that this new understanding of religious beliefs about God and human nature is itself understood to be either irrational at best, and dangerous at worst, to be dangerous itself, for a purely scientific or biological worldview will no longer see human beings as sacred or special.[59] Ratzinger notes that as images take their significance from the objects or ideas which they represent and not the elements composing them, so too are human beings significant because they represent God. He compares the true uniqueness of the human race to that of the aesthetic value of a painting; while canvas and oil may allow us to see painted image, it is the idea or observation that inspired the artist, beyond the frame, that holds its true value.[60]

Because Ratzinger understands God to be relational, both within Himself through the communion of the Persons of the Trinity and beyond Himself with the world,

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[56] Ibid., 45.
[57] Ibid., 45-46.
[58] Ibid, 46.
[59] Ibid., 46.
[60] Ibid., 47.

Ratzinger states that human beings who close themselves away from loving relationships betray their most fundamental natures.[61] Human beings possess capacities to have familiar and loving relationships with one another and with God, and so Ratzinger understands them to both share the same nature. Ratzinger understands from this that even though both may share common ancestors, human beings are distinct from animals because they are able to discover the loving relationship they have with God.

Not opposed to evolution or to the development of purely scientific accounts of the origin of human life, Ratzinger understands the Creation stories of Genesis to serve a separate but still important purpose:

> "All of this is well and good, one might say, but is it not ultimately disproved by our scientific knowledge of how the human being evolved from the animal kingdom? Now, more reflective spirits have long been aware that there is no either--or here. We cannot say, creation or evolution, inasmuch as these two things respond to different realities. The story of the dust of the earth and the breath of God [...] does not in fact explain how human persons came to be, but rather what they are. It explains their inmost origin and casts light on the project that they are. And vice versa, the theory of evolution seeks to understand and describe biological developments. [...] [W]e are faced with two complementary--rather than mutually exclusive--realities."[62]

Ultimately, Ratzinger understands that human existence began when humanity's ancestors first gained an awareness of God:

> "Indeed, to the question as to what distinguishes the human being from an animal, as to what is specifically different about human beings, the answer has to be that they are the beings that God made capable of thinking and praying. They are most profoundly themselves when they discover their relation to their Creator."[63]

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[61] Ibid., 47.
[62] Ibid., 50.
[63] Ibid., 48.

Finally, Ratzinger understands that human beings are called to live in a Christian community, extending love and compassion to one another, stressing the mutual dependence each and every human being has on every other for his or her survival. Ratzinger believes that every human being is owed dignity and compassion in light of his or her existence as an image of God, and that every human being should extend their love to all those in the community because of this. He says,

> "It must once again be stressed that no human being is closed in upon himself or herself and that no one can live of or for himself or herself alone. We receive our life not only at the moment of birth but everyday from without – from others who are not ourselves but who nonetheless somehow pertain to us. Human beings have their selves not only in themselves but also outside of themselves: they live in those whom they love and in those who love them and to whom they are 'present'."[64]

This theological understanding of human nature perceives a loving communal relationship as the principle aspect of human nature, for it allows for human creatures to live in the image of God. This perspective is quite different from that offered by Sagan, who approached the animals he understood to be human from a strictly scientific and biological perspective. Sagan's conclusion of what allows for a human existence is far different from Ratzinger's, because he approaches his subjects from an entirely different background and perspective. Sagan, who has no belief in God, cannot understand humanity to exist in any sort of divine image, and as a result cannot see *Homo sapiens* as separate from other species of animal life.

Different disciplines can lead ultimately to vastly different understandings of the same phenomenon, if they approach that phenomenon independently, as Sagan and Ratzinger have demonstrated. On the other hand, separate perspectives can also come to

[64] Ibid., 72.

understand a particular phenomenon in a very similar way, as MacIntyre shall now demonstrate.

Ethicist Alasdair MacIntyre defines human beings not as primarily rational, but as most basically embodied, and as a result, fundamentally helpless and disabled:

> "We human beings are vulnerable to many kinds of affliction and most of us are at some time afflicted by serious ills. How we cope is only in small part up to us. It is most often to others that we owe our survival, let alone our flourishing, as we encounter bodily illness and injury, inadequate nutrition, mental defect and disturbance, and human aggression and neglect."[65]

Noting that Western moral philosophers from Plato to Moore have made "only passing references to human vulnerability and affliction"[66], MacIntyre nevertheless believes that an acknowledgement of both the fact of human vulnerability, and of the human dependence on others, to be absolutely vital to accurately describing the human condition. MacIntyre's understanding at the same time stresses the fact that human beings are ultimately animals, products of biological processes against a world of similar animal species, and that very little distinguishes the human kind from any other animal kind. As a result of this vulnerability, MacIntyre stresses the intense need each individual human being has for the other members of his or her community; while alone he may be nothing, with the help of his or her family he or she can survive and flourish.[67]

Not believing that any clear line can be shown to stand between human and animal nature, MacIntyre views the human refusal to acknowledge its animal existence to be both prejudicial and the source of such misunderstandings of human nature as the

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[65] MacIntyre, Alasdair. Dependant Rational Animals. (Chicago: Open Court, 1998). 1.
[66] Ibid., 1.
[67] Ibid., 108-109.

Cartesian soul and a unique mind-body dualism.[68] MacIntyre stresses the fact that even if *Homo sapiens* is capable of behavior or actions beyond those of other animals, the biological nature of *Homo sapiens* underlies all they have evolved to be.[69]

MacIntyre mentions Heidegger's sharp separation between language-using humans and non- language using animals, and states that such a distinction is mistaken. Human nature's relation to a biological animal nature has been traditionally viewed to be, MacIntyre says,

> "[...] external and contingent in a way and to a degree that permits a single sharp line to be drawn between human beings and members of all nonhuman species. And that line is the line between those who possess language and those who do not. It is of course right to insist upon the significance of the differences between language -possessing and non-language-possessing animals. And some of these will be of crucial importance for my enquiry. But what exclusive, or almost exclusive attention to these differences may and commonly does obscure is the significance of the continuity and resemblances between some aspects of the intelligent activities of nonhuman animals and the language-informed practical rationality of human beings."[70]

MacIntyre includes in his argument the lack of a distinct division between language and non-linguistic forms of communication. Rather than a clear boundary, there is a spectrum of intermediate states, including a performance of intentional action, the recognition of an object, and belief about a recognized object.[71] MacIntyre defines language as an evolving feature that rests on a foundation of capacities such as recognition and belief, that are to be found in other forms of animal life and thus show that these shared abilities link language users with non- language users too closely to warrant any kind of clear separation. MacIntyre also notes the social existence *Homo*

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[68] Ibid., 14.
[69] Ibid., 6.
[70] Ibid., 50.
[71] Ibid., 50-51.

sapiens shares with many other animal species, such as chimpanzees and dolphins.[72] The similar communitarian lifestyles shared between these species, together with *Homo sapiens*, casts the idea of a clear separation between *Homo sapiens* and other animal species even further into doubt. At the same time, an acknowledgement of a shared kind of existence reaffirms the animal identity of *Homo sapiens*.

Because the community offers members of the species *Homo sapiens* a means of dealing with their physical frailties in the face of a dangerous world, the understanding that *Homo sapiens* is a social animal presents another essential dimension to human nature. The fact that it is an adaptation, however, gives MacIntyre cause to state that *Homo sapiens* is most fundamentally a vulnerable animal. If *Homo sapiens* is a human species, then to be human means ultimately to be nothing alone.

It might be noted that MacIntyre's emphasis on the animal nature of *Homo sapiens* allows him to build upon Sagan's biological understanding. Yet his recognition of human vulnerability also likens his view to Ratzinger's, who recognizes that human survival rests on the support of the loving Christian community. In a way, MacIntyre's understanding has a parallel to each.

1.5. Contemporary Understandings of Human Nature: J. Wentzel van Huyssteen. This section shall explore the multidisciplinary understanding of human nature described by J. Wentzel van Huyssteen, in the hope that it may provide us with a more satisfying understanding than any provided by a single discipline of study. An author on such varied topics as epistemology and anthropology as well as a professor of both theology

[72] Ibid., 58.

and science, van Huyssteen passionately defends the idea that the best way to study any object of knowledge is to employ a multidisciplinary approach that considers the understanding of that object from many different viewpoints.[73]

Thus in the case of *Homo sapiens*, van Huyssteen's description does not involve pinpointing one physiological aspect, social relationship, or behavioral trait, for this would fail to account for all the other ways in which the species is unique. Van Huyssteen would understand the unique nature of *Homo sapiens*, or any other object of study to be revealed through the consideration of an overlapping and mutually complimentary set of particular points of view. Doing so might single it out several different way in which Homo sapiens is unique and distinct.

Through God, van Huyssteen demonstrates his reason for believing that science can after all say something about divinity, in spite of Ratzinger's claim that the two are separate. Science, van Huyssteen says, can affirm or cast into doubt particular theological understandings of God, in order to demonstrate which of them is the most likely to offer the most accurate description.[74] While scientific knowledge of the universe on its own could inspire particular ideas of God, as it has for philosophers such as Antony Flew, who has come to embrace a form of deism,[75] such ideas are not obviously reconcilable with the God of the Judeo-Christian religion. The understanding that God does and can reveal Himself through both religious experiences and the testimony of religious texts can provide an additional body of knowledge that can help to more clearly

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[73] van Huyssteen, J. Wentzel. Alone in the World? Human Uniqueness in Science and Theology. (Grand Rapids: Eerdmans, 2006). 9.
[74] Ibid., 3-4.

[75] Flew, Anthony, and Gary Habermas. "My Pilgrimage from Atheism to Theism", *Philosophia Christi*, 6.2. (2004): 199.

shape one's understanding of God. To present one example, van Huyssteen notes how for theologians like himself, Darwinian theory has affirmed the immanence and involvement of the creating God within His universe, showing Him to be actively participating in the continuing realization of His Creation:

> "What Darwin did manage to show, and is still continuing to show us today, is that -- at least for some of us who are theologians -- traditional images of a totally transcendent God had been seriously overdrawn. As we will see, a theistic notion of God which includes a strong notion of God's immanence and involvement with the world may actually be rendered more plausible by Darwinian evolution. After Darwin it has become impossible for Christian believers to think of God in the semi-deist image of an absentee landlord who only interferes on rare occasions. Darwin, to his credit, sharpened up the choice: it would now be a question of all or nothing. God is either an active participant, immanent in the world, or completely absent."[76]

Notions of deism could thus become more difficult to defend, especially if one uses evolution to support an Eriugenan notion of a God who uses the world to realize existential possibilities, and employs over time many limited entities to reflect His own infinite nature. While such an understanding of God would rely in part on knowledge of God gained through revelation, it would also be based on empirical evidence, and so would, as a result, give reasons to reject religious understandings of God that seem inconsistent with the physical evidence available to the considerer. Finding a "safe space" where science and theology can complement one another in a "graceful duet", van Huyssteen says, allows theologians to truly speak meaningfully about God.[77]

Such an approach is significant because it allows us to, if we have faith in the reality of God, understand God to be an ever-active "accessory" to physical existence.

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[76] van Huyssteen, J. Wentzel. Duet or Duel: Theology and Science in a Postmodern World. (Harrisburg: Trinity, 1998). 105.
[77] Ibid., 7.

This allows us to invoke God as a cause of the events and objects of the world without falling into the trap of invoking a "God of the gaps" explanation. God remains invisible and empirically unprovable, yet a study of the world can reveal new understandings about the God who created it and glimpses of the divine nature. However, the consideration of just one method of acquiring knowledge about God would fail to give a full understanding of what God's nature must be like, and may even present a distorted view. Van Huyssteen himself attempts to avoid this in regard to *Homo sapiens*, by considering the species from many different perspectives, all the while attempting to *relate* the perspectives. He does this in order to uncover all the knowable attributes that make the species unique from the rest of nature.

One thing van Huyssteen considers in his investigation is the idea that both traditional and contemporary theological notions of human uniqueness often fail to consider the evolution and animal nature of the human species to be a source of insight into the uniqueness of *Homo sapiens*. Scientific and religious beliefs have become estranged as a result of this failure, while theological definitions of human nature have become increasingly abstract and impossible to investigate empirically.[78]

Desiring to find a way to link the two, van Huyssteen begins by considering scientific understandings of the uniqueness of *Homo sapiens* by focusing on Darwin and his impact on contemporary conceptions of human nature, noting that it is the cognitive capacities for reason, language, and morality that serve as the most significant marks of

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[78] van Huyssteen, J. Wentzel. Alone in the World? Human Uniqueness in Science and Theology. (Grand Rapids: Eerdmans, 2006). 127-144, 311. *For example, St. Augustine's understanding that human beings resemble God through their possession of memory, understanding, and will, fails to consider the physical aspect of embodied human nature.*

distinction "between man and the lower animals".[79] Recognizing that this Darwinian conception of human uniqueness remains the most influential and enduring understanding in contemporary science, van Huyssteen wishes to uncover the origin of these uniquely human attributes through an investigation into paleo-anthropology. Stressing the cultural existence of *Homo sapiens* as an important aspect of its human nature, van Huyssteen notes that the members of the species *Homo sapiens* evolved both biologically and culturally. Born into particular cultural milieus that were rooted in their biological capacities and vulnerabilities, every experience endured by a member of the species *Homo sapiens* was filtered through a particular cultural way of thinking. The evolution of that individual's culture was then able to progress as its members contributed to it through their own experiences and resulting beliefs, which augmented and extended the belief systems predating their lives.[80]

Van Huyssteen sees evolution as a continuous process transcending the mediums of its operation:

> "On the one hand, then, organic evolution - particularly the evolution of the human brain - can be seen as the basis of cultural evolution. On the other hand, however, the latter can never be reduced to the former: cultural evolution requires explanations beyond the biological theory of evolution in its strictest sense. Therefore the term 'evolution' applies to both the development of the organic world, from unicellular organisms to humans, and the development of culture."[81]

Van Huyssteen's understanding sees evolution working first through biology and then through culture, transitioning from one to the next by means of the *Homo sapiens* mind, which it formed through its processes and then put to use. As experiences occurring

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[79] Ibid., 311.
[80] Ibid., 312.
[81] van Huyssteen, J. Wentzel. Duet or Duel: Theology and Science in a Postmodern World. (Harrisburg: Trinity, 1998). 146-47.

outside an organism's biological form allowed culture to shape and evolve, evolution can be understood to have entered into an entirely new kind of "world" in which to operate. Van Huyssteen understands culture to be ultimately rooted in *Homo sapiens*' biological origins and capacities, though not completely explainable on a biological level, as currently-lived lives and preserved histories serve as equally important foundations.

Thus van Huyssteen turns next to cultural, theological conceptions of humanity, which include the notion that humankind was made in the image of God. A study of more ancient understandings of *imago Dei* demonstrated that both traditional Old Testament understandings, together with early Christian conceptions clearly saw humanity to be a part of the physical world.[82] These traditional views emphasized its embodied existence rather than an intellectual soul, recognizing that while human beings were the bearers of God's life in world, their limited natures allowed them to act in ways not at all like God, even though they possessed the awareness to know the difference between Godliness and ungodliness.[83] He tells us that

> "for [Alasdair] MacIntyre, whatever our degree of difference from other animals may be, it is our evolutionary developed bodies that are the bearers of human uniqueness, and it is this embodied existence that confronts us with the realities of vulnerability and affliction. [...] For this reason the image of God is not found in some intellectual or spiritual capacity, but in the whole embodied human being, 'body and soul'. In fact, the image of God is not found *in* humans, but *is* the human, and for this reason *imago Dei* can be read only as *imitatio Dei*: to be created in God's image means we should act like God, and so attain holiness by caring for others and for the world."[84]

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[82] Ibid., 272-273.
[83] van Huyssteen, J. Wentzel. Alone in the World? Human Uniqueness in Science and Theology. (Grand Rapids: Eerdmans, 2006). 315.
[84] Ibid., 320.

Van Huyssteen's statement that the idea of *imago Dei* is equivalent to the notion of *imitatio Dei* means that for human beings to be truly unique among all of God's creations, they must act as God acts in order to reflect His nature. Van Huyssteen also discusses Calvin's assertion that human beings must be just and merciful just as God is just and merciful in order to accomplish this.[85] Such ideas strongly parallel the understanding put forth by Ratzinger, as well as the understanding of human nature held by MacIntyre. In fact, van Huyssteen specifically discusses MacIntyre as an effective description of the implications of humanity's embodied physical nature. He points out that humankind's weakness and dependence allow them opportunities to act in God's place in the world, and to imitate the divine.[86]

It must be noted that because van Huyssteen understands both religious and scientific views to be products of culture, it is possible to explain the origins and history of each provided that the proper archaeological and anthropological information to reveal such histories is available. Because of this, either may be understood to be rational in its own way, rooted in particular biological capacities that through life experience give rise to particular ways of thinking and seeing the world. Nevertheless, simply one scientific explanation or one theological definition of what makes an organism "human" would lack the descriptiveness and effectiveness of a definition that incorporated a number of different viewpoints from several disciplines of cultural knowledge. This is why neither Sagan's nor Ratzinger's explanations of human nature would alone satisfy van Huyssteen: while both might be true as far as they can speak about humanity, neither is able to tell the whole story. While Ratzinger cannot tell us biologically how human beings are able

[85] Ibid., 316.
[86] Ibid., 283-287.

to emulate God in the physical world, Sagan cannot ultimately say why the *neocortex* functions as it does and provides *Homo sapiens* with such unique abilities.

Another strength can be found in the way one perspective is able to answer questions or deal with issues beyond the other's authority; while Ratzinger's understanding that the *breath of God* gives humanity allows him to defend the humanity of an early-stage embryo, Sagan cannot claim humanity to be present in an embryo or fetus until sufficient neocortical activity is present. Even the possibility of this being a sufficient reason is only a reasonable guess, as Sagan himself admits:

> "But perhaps we might set the transition to humanity at the time when neocortical activity begins, as determined by electroencephalography of the fetus".[87]

"*Perhaps* we *might*". As it can be demonstrated, employing a multidisciplinary approach holds clear advantages over one gained from a single magisterium of study, for it offers a greater and more comprehensive understanding of the relevant object of knowledge. Through his multidisciplinary approach, van Huyssteen is able to find a way to accept both the views of human nature provided by Ratzinger and MacIntyre alongside the one put forth by Sagan. He is even able to show how both biological and cultural evolution may serve as a source of the theological and scientific approaches *Homines sapientes* employ as they seek to understand themselves.[88] We might observe, in light of this, that the ethical understanding of humanity demonstrates the practical value of the theological. The theological view may then be challenged by the scientific one, in order to determine whether or not it seems reasonable, if God does exist and has revealed Himself to

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[87] Sagan, Carl. The Dragons of Eden: Speculations on the Evolution of Human Intelligence. (New York: Ballantine, 1977). 208.
[88] Huyssteen, J. Wentzel. Duet or Duel: Theology and Science in a Postmodern World. (Harrisburg: Trinity, 1998). 164-166.

particular creatures inhabiting His Creation. The theological understanding of humanity, in the meantime, can serve as a foundation for the ethical understanding, justifying its practices. If capacities for reasonable and abstract thought can allow an individual to know and understand his or her responsibility to his or her fellow human beings in the world, then that religious view can be considered a plausible possibility. It may then be tested against other plausible views, so that in the end, the understanding of a human nature made in the image of God can be at its fullest and most complete.

Scientific, theological, and ethical understandings of human nature allow van Huyssteen to describe the human being as the possessor of capacities for "language, self-awareness, moral awareness, consciousness, symbolic propensities, [and] ritual and mythology."[89] At the same time, in agreement with the Darwinian definition of human uniqueness discussed already, van Huyssteen would also say that *Homo sapiens* is a distinct species due to its status as the sole surviving member of the taxonomic family of *Hominidea*, and thus unique in its possession of both a fully bipedal stance and a particularly sophisticated *neocortex*. More than this, van Huyssteen notes:

> "We are also identified by the unique presence of a spoken language; the remarkable cognitive fluidity to think, reason, plan, and generate mental symbols, especially as expressed in art and religion; and the bizarre inability to sustain prolonged amounts of boredom."[90]

1.6. Conclusion. Over the course of this chapter, I have shown how many different thinkers of many different backgrounds have offered many different ways and reasons for believing that human beings are unique from all other forms of animal life. Through my

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[89] van Huyssteen, J. Wentzel. Alone in the World? Human Uniqueness in Science and Theology. (Grand Rapids: Eerdmans, 2006). 317.
[90] Ibid., 317.

look at van Huyssteen, I have shown that good reasons exist to attempt to pursue an understanding of human nature that is not restricted to one single domain of study. This seems especially reasonable if we recognize that multiple perspectives will provide a wealth of valuable information to anyone who considers them, far more than just one discipline. If someone wishes to make a case for a unique status for humanity, a status that distinguishes it from the rest of nature, then it is necessary to reach a thorough and comprehensive understanding of what human beings are.

If van Huyssteen's multidisciplinary definition of human nature is judged to be an accurate and satisfactory assessment of human nature, accounting for many unique abilities and physiological traits that allow creatures possessing them to play the role described by theological notion of humanity, then we may judge the strength of the uniqueness *Homo sapiens* possesses by considering how many of these human attributes it has in common with other animal species. This shall be the focus of the following chapter.

Chapter Two: Is a New Understanding of "Humanity" Necessary?

The purpose of this chapter shall be to consider the nature of the uniqueness possessed by *Homo sapiens*, in light of its animal natures and the capacities it shares with other animal species. If the difference between *Homo sapiens* and other animal species is one of degree rather than kind, it might be wondered whether or not humanity itself might be found in other species, even if in lesser degrees. The following sections shall consider this possibility.

The previous chapter established that the multidisciplinary understanding of humanity defended by van Huyssteen offers the most comprehensive picture of what makes an organism human. While van Huyssteen presents biology and culture as the places where we find the answer to how an animal is able to act in a human way, it is the role of ethics to tell us what that human way of acting entails. Anthropology and paleoanthropology, he says, can reveal to us which species can be understood to be or have been human through observing their behavior, and together with archaeology can tell us where and when other human creatures can be demonstrated to have once existed.[91] Theology then, van Huyssteen claims, is left to explain ultimately why human nature exists, as well as reveal to us on a higher level what human nature is, with the understanding that it reflects the *imago Dei*.[92]

This chapter shall begin by challenging us to find a human nature in other animal species, through offering reasons why it should be reasonable to do so. The views of a

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[91] van Huyssteen, J. Wentzel. Alone in the World? Human Uniqueness in Science and Theology. (Grand Rapids: Eerdmans, 2006). 165-176.
[92] Ibid., 274-275.

thinker who hopes to reconcile animal nature and human uniqueness by recognizing humanity to exist in other species shall then be considered. This controversial understanding of human nature shall then be compared with van Huyssteen's understanding, continuing what was begun in the preceding chapter.

2.1. "Human" and "*Homo sapiens*": No Longer Perfect Synonyms? The purpose of this section shall be to determine whether or not it is plausible for human nature to exist in another species besides *Homo sapiens*. This shall be done in light of the multidisciplinary understanding of humanity offered by van Huyssteen in the last chapter, recognizing that all of *Homo sapiens* particular physiological and behavioral traits are products of biological and cultural evolutionary processes.[93]

Homo sapiens is so universally understood to be a human species that the very word "human" is interchangeable with the scientific name, "*Homo sapiens*". Because of this, the idea that humanity could be possessed by other organisms has been somewhat difficult for many *Homines sapientes* to come to terms with, both in Carl Linnaeus's time and until the present day.[94] Even when Carl Sagan notes that while a whale capable of the same neocortical functions as the species *Homo sapiens* should also be considered a human being, [95] he nevertheless continues to use the word "human" when referring specifically to the species *Homo sapiens* throughout his book.[96] Though I myself have attempted to avoid using the two terms interchangeably up to this point, doing so has

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[93] Huyssteen, J. Wentzel. Duet or Duel: Theology and Science in a Postmodern World. (Harrisburg: Trinity, 1998). 146-147.
[94] Sagan, Carl. The Dragons of Eden: Speculations on the Evolution of Human Intelligence. (New York: Ballantine, 1977). 112.
[95] Ibid., 207.
[96] Ibid., 22-23, *explicitly*.

proven to be a challenge, especially when presenting the ideas of an authority like Ratzinger who, while clearly having *Homo sapiens* in mind when he refers to humans, never singles out that particular species when he actually uses the term, "human".

The reason this attempt was made arises now, as it becomes the focus of this first part of this second chapter to determine whether Sagan was correct in his speculations that human nature could exist in other animal species. The evolution of *Homo sapiens* from other related forms of animal life offers no reason, at least from the perspective of science, why humanity should not be found somewhere besides the species *Homo sapiens*. As it is through biological mechanisms such as evolution that allow for human nature to exist in the world, a serious search for humanity in other species, especially those related closely to *Homo sapiens*, of common ancestry and a similar evolutionary history, may reasonably reveal a similar nature to theirs, or at least the beginnings of one. The existence of a possible human nature in another species of animal could drastically alter any conceptions we might have of human uniqueness. The tendency of *Homo sapiens* to separate itself from other animal species would be given a further reason for rejection if it could be shown that no capacity or behavior was exclusively exhibited by *Homo sapiens*. It is this possibility which shall be explored in the next section of this chapter.

The discipline of ethics has very little to say about restricting the ability to live as a human being to one species; MacIntyre makes references and comparisons to the similar social existence of dolphins and chimpanzees, noting that in this way, such animal species have much in common with *Homo sapiens*. Also, the endangered status of

chimpanzees and other primates allows us to understand these species to be vulnerable much in the way MacIntyre saw humanity to be.[97] However, the question of whether human existence is to be found elsewhere in nature besides *Homo sapiens* may be more difficult to investigate from a theological perspective. It might even appear to challenge some theological understandings of why *Homo sapiens* is unique, in light of such religious (and particularly Christian) beliefs as the Incarnation of God in Jesus of Nazareth. Jesus's status as a member of the species *Homo sapiens* might seem, on one hand, to restrict the possibility of creatures capable of knowing and emulating God to that particular species. On the other hand, Ratzinger's acknowledgement of the humble origins of human nature in the dust of the earth, together with his acceptance of evolutionary processes, may allow for us to be a bit more open to the possibility.[98] Let us consider the possibility, for the moment. Would such creatures be understood to be ultimately the same as *Homo sapiens* in all the significant ways, possessing the same intellectual abilities, relationships, and vulnerabilities? The understanding of an omnipotent God capable of creatively expressing Himself through an infinite number of ways might also open the way for a possible theological investigation.

As a result of recognizing this, we have a theological reason to suspect that a nature greatly resembling the human nature of the species *Homo sapiens* could be found elsewhere in the created world. If such a nature could indeed be found, a careful analysis

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[97] Teleki, Geza. "They Are Us." The Great Ape Project: Equality Beyond Humanity, eds. Paola Cavalieri and Peter Singer. (New York: St. Martin's Press, 1993). 299.

[98] Ratzinger, Joseph. In the Beginning: A Catholic Understanding of the Story of Creation and the Fall, trans. Boniface Ramsey (Grand Rapids: Eerdmanns. 1995). 43-44.

could reveal whether or not the differences which separate it from the nature possessed by *Homo sapiens* are enough to deny understanding it to be truly "human".

2.2. Looking Elsewhere: The "Old Men" of Sumatra and Borneo. In this section, I shall examine a species which serves as a possible candidate for the possession of human nature outside the species *Homo sapiens.* I shall also offer an explanation of why expecting to find a human nature in that species is reasonable.

The most logical place to begin searching would seem to be among the species most closely related to *Homo sapiens*. As the other species of hominid belonging to the genus *Homo* are presently extinct, only a few distant relatives exist that could feasibly share a nature close to *Homo sapiens'*. With no living specimens of *Australopithecus* or *Homo erectus* alive to study, only four candidates exist that could even begin to seem suitable: the orang-utan, the gorilla, and the two species of chimpanzee. Of these, the primate that arguably could serve as an effective subject of study in such an investigation is the orang-utan, for a number of important reasons. Though the species evolved in Asia and not Africa , unlike *Homo sapiens* and the other species of great ape that continue to survive, the orang-utan has been observed to possess a significant number of behavioral and biological similarities to modern *Homo sapiens*. To begin, the native peoples of Malaysia, who lived for centuries in constant contact with the species, believed them to be a more ancient race of persons like themselves, able to speak but silent by choice.[99] In

[99] Miles, H. Lyn White. "Language and the Orang-utan." The Great Ape Project: Equality Beyond Humanity, eds. Paola Cavalieri and Peter Singer. (New York: St. Martin's Press, 1993). 43.

fact, the term "orang-utan" is derived from Malay words which mean, "old person of the forest".[100]

Physiologically, orang-utans share a long list of similarities with *Homo sapiens*, as recounted by anthropologist Lyn Miles, which include, she states,

> "a similar gestation period, brain hemispheric asymmetry, characteristics of dentition, sexual physiology, copulatory behavior, hormonal levels, hair pattern, mammary gland placement, and insightful style of cognition".[101]

Orang-utans have also been observed to stand and walk fully upright while occupying tree branches, using their free hands to pick fruit from overhanging limbs otherwise beyond their reach.[102] This has lead anthropologists such as Susannah K. S. Thorpe to theorize that a similar bipedal stance was common to all tree-dwelling apes up to five million years ago, until diminishing forest lands in Africa imposed changes onto the apes that would serve as the ancestors of present-day gorillas, chimpanzees, and *Homo sapiens*. The conclusion of such a view is that while the ancestors of *Homo sapiens* eventually regained their ability to stand fully erect, as other African great apes advanced no further than knuckle-walking, the Asian ancestors of the orang-utans preserved this ancient ability.[103] The orang-utan thus serves as an important link to *Homo sapiens*' prehistoric past, for it retains both a lifestyle and physiological features once possessed by both their common ancestors, abandoned by every other species of great ape. This sentiment is reiterated by Miles, who notes,

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[100] Ibid., 43.
[101] Ibid., 45.
[102] Bower, Bruce. "Red Ape Stroll." *Science News.* 172 (Aug. 4, 2007). 72-73
[103] Ibid., 72-73.

> "Both the fossil data and comparisons of DNA and other biochemical measures suggest that the orang-utan is the most conservative, or primitive, of the great apes. They are most like the ancestral hominoid (ape-like primate) living about twelve million years ago that later gave rise to apes and humans. Orang-utans have retained more of the characteristics of this hominoid than have the African apes. As a result, orang-utans have been labeled a 'living fossil', and thus are a kind of time traveller."[104]

In addition to such physiological traits as bipedalism, the observation of orang-utans in both their natural habitat and in captivity has revealed startlingly *Homo sapiens*-like behavior and abilities. While orang-utans in the jungles of Sumatra and Borneo have been observed to build shelters and teach one another to use simple tools, orang-utans in captivity have been taught to tie knots, make blades out of flint, and put them to practical use.[105] The facts of physiological and behavioral similarity, common ancestry, and capacities for culture and tool use all point to the conclusion that the orang-utan should be viewed as an ideal candidate for consideration in the quest for humanity beyond the species *Homo sapiens*.

While the solitary nature of orang-utans contrasts sharply with the social existence shared by *Homo sapiens*, the orang-utan compensates through its possession of these other distinct characteristics. Carl Sagan and van Huyssteen each point out the importance of bipedalism to the cognitive development of the species *Homo sapiens* and the evolution of the brain.[106] Because the brains of orang-utans and *Homo sapiens* share a number of similar features, the different social habits practiced by each should not discourage the search for a possible human nature in this species.

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[104] Miles, H. Lyn White. "Language and the Orang-utan." The Great Ape Project: Equality Beyond Humanity, eds. Paola Cavalieri and Peter Singer. (New York: St. Martin's Press, 1993). 45.
[105] Ibid., 45.
[106] Sagan, Carl. The Dragons of Eden: Speculations on the Evolution of Human Intelligence. (New York: Ballantine, 1977). 88.

While their vocal chords are not suitable for spoken language,[107] orang-utans have nevertheless demonstrated linguistic abilities through experiments in which captive individuals were taught to use American Sign Language. Lyn Miles was the first anthropologist to conduct such an experiment with a member of this species, as she for a period of nine years instructed and observed a young orang-utan named Chantek. At the age of ten months, Chantek began to demonstrate his understanding of the signs being taught to him by signing to his caregivers on his own.[108] As time passed, Chantek displayed an ability to use 150 different words,[109] as well as understand the corresponding terms for them in spoken English, as his teachers often vocalized the words they signed when they addressed him. Chantek demonstrated this ability to recognize spoken words by performing the signs corresponding to words he recognized while listening to the radio.[110]

As he employed the signs in his vocabulary to communicate and express his needs, Miles and her colleagues noted that Chantek did not just repeat the signs he had been taught, but used them in spontaneous and creative ways. As Chantek encountered new objects and people he had never seen before, he coined new expressions and sign combinations in order to address or call attention to them. Dubbing the contact lens solution he observed one of his caregivers using "eye-drink" and referring to a university employee whom he saw frequently as "Dave-missing-finger" on account of a hand injury

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[107] Miles, H. Lyn White. "Language and the Orang-utan." The Great Ape Project: Equality Beyond Humanity, eds. Paola Cavalieri and Peter Singer. (New York: St. Martin's Press, 1993). 46.
[108] Ibid., 46.
[109] Ibid., 47.
[110] Ibid., 48.

the man had once suffered, Miles asserts that Chantek became under her instruction not just a learner, but a "creator of language".[111]

In addition to Chantek's ability to recognize and use signs to communicate his needs and thoughts, Miles describes a number of distinct behaviors and capacities demonstrated by Chantek typically only ascribed to *Homo sapiens* as marks of human uniqueness.[112] Noting that one indicator of a capacity for symbolic thought is the behavior of pointing with an extended finger, Miles recounts how Chantek first began to perform this action at around the age of two years (slightly later, she notes, than in children of the species *Homo sapiens*) in order to indicate where he wanted to be carried and later to answer simple questions.[113] Miles also discusses how Chantek displayed an ability to refer to objects and events not physically present in the room with him. Miles notes that the ability to conceptually represent an object of experience and then retain the image of it in that object's absence was an important step in the development of language in *Homo sapiens*, as it allowed the species' ancestors to communicate concepts in many different environments and circumstances. Regarding this, Miles refers to an incident in which Chantek told both her and another of Chantek's caretakers that he wanted to go for a car ride. As the car neared a particular location, Chantek signaled the words, "ice cream" and attempted to commandeer the wheel in the direction of an ice cream shop he had been taken to on previous occasions.[114] Through situations such as these, Miles tells

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[111] Ibid., 50.
[112] Ibid., 51-52.
[113] Ibid., 47.
[114] Ibid., 48.

us that Chantek displays evidence of being cognitively "free from his environment", in her words, his thoughts not restricted to objects and settings presently before his eyes.[115]

Another form of behavior displayed by Chantek that Miles describes is deception, as she recounts several incidents that demonstrate Chantek's ability to lie. Among them Miles describes an occasion where Chantek took one of her pencil erasers and, after pretending to swallow it, opened his mouth widely for her in order to show her that it was gone. In spite of his demonstration, and his signing to Miles the words, "food-eat", Chantek had in fact concealed the eraser in his cheek. Miles reveals that the eraser was eventually discovered in Chantek's bedroom, in a hiding place where he placed objects he wished to keep secret. Miles notes such behavior as significant because deception demonstrates an ability to put one's self in the place of another and imagine the way that other would think in a particular situation.[116]

Miles finishes her essay on Chantek with a reflection on the meaning of the word "person", naming not just a list of qualifying characteristics as Dennett did,[117] but instead describing the nature of the relationships that organism is capable of sharing with others. Specifically, she states that the notion of personhood arises from the cultural tendency of *Homo sapiens* to recognize some beings as like themselves ("us"), while seeing other beings as entirely different ("them" or "other") in nature.[118] Looking at Chantek, Miles writes that she would not consider him to be either entirely like herself or like a free-

[115] Ibid., 48.
[116] Ibid., 48.
[117] Ibid., 51.
[118] Ibid., 54.

living orang-utan, but instead "something in between".[119] Miles understands that an individual's ability to communicate with, and to relate to, others determines whether or not those others accept that individual as one of their own. In the case of Chantek, the language and culture of another species have allowed him to act in a way similar to that species relationally and socially. At the same time his relationship with members of his own species, whom he continued to interact with, allowed them to accept him as one of their own kind. While not denying his orang-utan nature, Miles believes that the language and culture of the species *Homo sapiens* have shown Chantek to be both ethically and socially a person, just as would be any immature *Homo sapiens* who displayed fewer of the characteristics and capacities as those possessed by Chantek.[120] Given that Chantek is physiologically no different from other member of his own species, and given the number of physiological similarities shared between orang-utans and members of the species *Homo sapiens*, already discussed, a convincing case can be made for those who would defend their personhood.

Miles's observations of Chantek make a convincing case for the personhood of orang-utans, and a comparison between Miles's and MacIntyre's understanding of human nature from the previous chapter shows Miles's notion of personhood to be fully compatible with MacIntyre's understanding of human nature. This is especially true when considering the current plight of the free-living apes remaining in Africa and Southeast Asia, whose survival depends entirely on *Homo sapiens*' holding back from the further destruction of their habitats.[121] As a species, orang-utans are truly vulnerable, just

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[119] Ibid., 54.
[120] Ibid., 54.
[121] de Waal, Frans. Our Inner Ape. (New York: Riverhead, 2005). 239-240.

as MacIntyre described human nature to be, and are most certainly in need of *humane* care and protection from those others in a position to give it to them.

2.3. Explaining Discontinuity: Western Attitudes Toward Other Primates. Though the preceding section offered a number of convincing arguments to at least consider the humanity of another animal species, many *Homines sapientes* would likely remain skeptical. This is because many *Homines sapientes* perceive a kind of discontinuity between their own kind and other animals. As biologist Richard Dawkins puts it,

> "The word 'apes' usually means chimpanzees, gorillas, orang-utans, gibbons, and siamangs. We admit that we are like apes, but we seldom realise that we *are* apes. Our common ancestor with the chimpanzees and gorillas is much more recent than their common ancestor with the Asian apes, the gibbons and orang-utans. There is no natural category that includes chimpanzees, gorillas, and orang-utans but excludes humans."[122]

What Dawkins means is that, however much the members of the species might deny it, Homo sapiens is biologically just as much a kind of ape as is the gorilla or orang-utan. The section which follows shall address the cultural tendency of *Homo sapiens* to set themselves apart from the rest of the animal world, in spite of their close physiological and biological relation to it.

In light of the acceptance of Darwinian evolution, modern biology has come to embrace the understanding that *Homo sapiens* is not only descended from other forms of animal life, but is in fact just one of many other related, surviving, species. While scientific investigators such as Carl Sagan, considered in the first chapter, embrace this fact, much of Western thought has largely resisted in following his example.

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[122] Dawkins, Richard. "Gaps in the Mind." The Great Ape Project: Equality Beyond Humanity, eds. Paola Cavalieri and Peter Singer. (New York: St. Martin's Press, 1993). 82.

Philosophers such as Martin Heidegger, as noted in the previous chapter, as well as many others, denied beliefs to other animals on the basis that they do not use language.[123] In fact, MacIntyre tells us how Heidegger once wrote of the "'scarcely fathomable, abyssal' character of the 'bodily kinship' of humans to animals."[124] The origin of this attitude in Western thought shall now be investigated.

I shall begin by noting that not every Westerner shares this sentiment. For example, Lyn Miles's studies with Chantek allowed her to experience him as something more than a mere animal:

> "We have lived day to day with Chantek and have shared common experiences, as if he were a child. We have healed his hurts, comforted his fears of stray cats, played keep-away games, cracked nuts in the woods with stones, watched him sign to himself, felt fooled by his deceptions and frustrated when he became bored with his tasks. We have dreamed about him, had conversations in our imagination with him, and loved him. Through these rare events shared with another species, I have no doubt I was experiencing Chantek as a person."[125]

Through these words, Miles shows us that she has rediscovered the thought of James Burnett, Lord Monboddo, who in the eighteenth century asserted that the orang-utan was indeed a human being, and that, contrary to Aristotle, speech was not a necessary determiner of a being's personhood.[126] While the indigenous Malay people of Southeast Asia might have always comfortably accepted the orang-utans living in the forests alongside them as kindred, the people of the Western world have not, at least in recent centuries, been so typically open to recognizing a similar nature behind a different appearance, even when that difference is quite minor.

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[123] MacIntyre, Alasdair. Dependant Rational Animals. (Chicago: Open Court, 1998). 12, 33, 43-45.
[124] Ibid., 43.
[125] Miles, H. Lyn White. "Language and the Orang-utan." The Great Ape Project: Equality Beyond Humanity, eds. Paola Cavalieri and Peter Singer. (New York: St. Martin's Press, 1993). 50.
[126] Ibid., 113, 119.

Yet this attitude was not always true of European people; before the Age of Discovery and the following colonial period, Europeans had no conception of race, or even a notion of "Europeans" as a collective group. According to historian James W. Loewen, it was only when explorers encountered such (in their minds) foreign peoples as the American Indians that this began to change. These encounters resulted in a new way for the people of such countries as Spain or Portugal to see themselves, as they came to regard themselves as different from the people they found inhabiting the West Indes.[127] As a result of the formation of a European self-consciousness, the way people from other parts of the world were perceived began to change. The unchristian beliefs of the American Indians, together with the lack of any mention of them in the Bible, prompted some Westerners to regard them as less than human, unrelated to the lineages of people described in biblical history.[128] While Monboddo regarded orang-utans to be of his own kind, his contemporaries, Voltaire among them, excluded the African people whom Voltaire called "Hottentots".[129] Monboddo's ideas, therefore, represent a definite break from the prevailing attitudes of his place and time, and the last centuries leading up to it, and voice sentiments which Miles would no doubt agree with two hundred years later.

The lack of any indigenous apes in Europe (besides *Homo sapiens*) surely helped contribute to the discontinuous nature of the Western mind. The people of other parts of the world, such as India and Japan, held vastly different views of apes and monkeys than

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[127] Loewen, James W. Lies My Teacher Told Me: Everything Your American History Textbook Got Wrong. (New York: Touchstone, 1995). 67-68.
[128] Ibid., 66-67.
[129] Clark, Stephen R. L. "Apes and the Idea of Kindred." The Great Ape Project: Equality Beyond Humanity, eds. Paola Cavalieri and Peter Singer. (New York: St. Martin's Press, 1993). 114.

would Europeans after encountering them in their overseas explorations.[130] In addition to the attitudes of the Malay toward orang-utans, already discussed, other non- Western views acknowledged the similarities apes held to *Homo sapiens*, and understood, through this resemblance, that apes were the "wisest of beasts" and intermediaries between humanity and nature. A number of Eastern religions took from their recognition of this similarity an understanding that apes lived a sort of divine existence, bridging the gap between their own kind and animal nature, between human society and the wilderness.[131] Thousands of years of exposure to creatures so similar in appearance to themselves fostered in Eastern minds attitudes toward these creatures that elevated them above other animals, in light of their similarity and obviously kindred nature.

Europeans could not have understood things more differently. The eighteenth and nineteenth century explorers and colonists of Africa and Asia saw apes as either savage or comical, imagining them to be either unrestrained monstrosities, utterly unlike human beings, to clowns when displayed dressed in human clothing, as parodies of human nature.[132] Some Europeans of the period even identified primates, such as baboons, with the devil, seeing them not as links with the natural world, as Asian cultures did, but as wicked, distorted images of themselves.[133] While the prevailing nineteenth century belief that the gorilla was a savage and bloodthirsty monster could not have been more different from the comical chimpanzee as a circus performer, neither understanding saw these

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[130] Corbey, Raymond. "Ambiguous Apes." The Great Ape Project: Equality Beyond Humanity, eds. Paola Cavalieri and Peter Singer. (New York: St. Martin's Press, 1993). 129-130.
[131] Ibid., 130.
[132] Kortlandt, Adriaan. "Spirits Dressed in Furs?." The Great Ape Project: Equality Beyond Humanity, eds. Paola Cavalieri and Peter Singer. (New York: St. Martin's Press, 1993). 141.
[133] Corbey, Raymond. "Ambiguous Apes." The Great Ape Project: Equality Beyond Humanity, eds. Paola Cavalieri and Peter Singer. (New York: St. Martin's Press, 1993). 129.

creatures to be intelligent, and failed to recognize them as anything like the person Lyn Miles saw in Chantek.

Let us conclude this section. The exploration of North and South America and later sub-Saharan Africa brought Europeans into contact with people so politically and religiously different from themselves that Europeans became aware of themselves as a distinct "kind" of people. As this happened, the differences between themselves and the people of places such as Ethiopia, gave way to attitudes that they were inferior to Europeans as well.[134] If other people were to be judged as less human than themselves, then it is little surprise to find that apes were seen as *even less* human, through Western eyes. In light of the findings of language experiments such as those conducted by Miles with Chantek, convincing reasons exist to believe that animal nature is not so different from the nature of the species *Homo sapiens* after all. Understanding that much of observable human nature may *not* be exclusive to the species *Homo sapiens* forces us to consider whether whether non- *Homo sapiens* species exhibiting "human behavior" might themselves be called "human" after all. Recognizing that *Homo sapiens*' tendency and to restrict humanity to its own species may be, in fact, nothing more than a Western cultural practice may free us to consider intelligent animal life from another point of view. The careful weighing of this possibility may result in a need to re-understand what humanity really means.

The ideas of a theistic thinker who *does* try to drastically revise our understanding of humanity in light of all of this shall be considered in the next section.

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[134] Loewen, James W. Lies My Teacher Told Me: Everything Your American History Textbook Got Wrong. (New York: Touchstone, 1995). 143.

2.4. Contemporary Understandings of Human Nature: Stephen R. L. Clark. This section will address the undeniably animal nature of *Homo sapiens* through the ideas of someone who both acknowledges the artificial nature of the perceived discontinuity between *Homo sapiens* from other species of ape, who as a result proposes a new way of understanding human nature. It will be observed how this attempt to come to terms with the animal nature of *Homo sapiens,* while still embracing the notion *imago Dei,* could result in a vastly different understanding of what being human means.

In an essay about the reasons for the exclusion of other apes from humankind, Stephen R. L. Clark acknowledges the animal nature of *Homo sapiens* almost immediately. "Either," Clark begins, "we are simply products of evolutionary processes or we are not."[135] Exploring the first of these two possibilities in his essay, Clark states that in light of the common ancestry all surviving apes share, any objective judge would have no choice but to consider *Homo sapiens* to be just one of several other species of ape.[136] More than the resemblances the orang-utan, for example, and the member of the species *Homo sapiens* share to one another, both in appearance and cognitive abilities, it is the family relationship the two have together, along with the gorilla and the two species of chimpanzee, that force us to see all these creatures as members of the same kind. Clark notes that the differences that appear to distinguish each of these species need not necessarily force us to separate one kind from another. After all, he says, variations can

[135] Clark, Stephen R. L. "Apes and the Idea of Kindred." The Great Ape Project: Equality Beyond Humanity, eds. Paola Cavalieri and Peter Singer. (New York: St. Martin's Press, 1993). 114.
[136] Ibid., 114.

exist within a kind, such as the two surviving species of chimpanzee, for example.[137] Also, species have not been understood to be fixed categories since the time of Darwin.[138]

As individual organisms comprise any species of the animal kingdom and are considered to be of the same kind through shared characteristics, the point where accumulating variations in a creature's physiology make it different enough from its direct ancestors to classify it as some other kind of creature can be difficult to pin-point, especially as changes occur gradually over periods of thousands of years or more.[139] Clark notes the existence of collections of interbreeding populations called *Realgattungen*, or *ring species*, such as groups of salmon and seagull capable of breeding with slightly different populations occupying nearby waters, but not populations a little further away.[140] The existence of animal populations such as these leads Clark to suspect that all surviving species of animal are in fact *Realgattungen*. The intermediary transitions between each species surviving today, for whatever reason, simply died out, leaving gaps in what would otherwise be a gradual continuum. "Lose all the other dogs," Clark says, "and wolfhounds and chihuahuas would be unlikely conspecifics."[141] This is exactly what happened to the primate species linking the chimpanzee, the gorilla, and *Homo sapiens*.

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[137] Ibid., 114.
[138] Ibid., 115.
[139] Ibid., 116-117. *More information on contemporary taxonomic classifications can be found in the following sources:*
Meyer, Ernst. Principles of Systematic Zoology, (New York: McGraw Hill, 1969).;
Hull, David. "Are Species Really Individuals?", Systematic Zoology, 25 (1974): 178-191.

[140] Ibid., 116. *See also:*
de Sousa, Ronald. "Kinds of Kinds: Individuality and Biological Species." *International Studies in the Philosophy of Science,* 3.2 (1989): 119-135.;
Jeffrey, Charles. Biological Nomenclature. (1973; Cambridge: New York, 1992).

[141] Ibid., 117.

A necessary implication of this possibility is the notion that *Homo sapiens* and the other species of higher primates might, in addition to being sister species, be also different links in the same *Realgattung.* If species so closely related are, in the end, only varieties of the same kind, then the variations separating them are ultimately superficial, especially if all are equally *Realgattungen* linking together the same chain. If *Homo sapiens* are a human species, then in Clark's view there is little reason to think other members of the taxonomic family *Hominidea* shouldn't be either.

But Clark is not content to claim humanity rests solely upon relation and common descent. He instead presents a different understanding stemming from his understanding of God. Believing human beings to exist in *imago Dei,* reflecting back God's nature as though they were "mirrors of the divine"[142], he considers a human individual's ability to know and understand to be derivative of the Divine Reason it evolved to imitate. If a very young child of the species *Homo sapiens* embodies a lower intensity of the light of Reason than an adult orang-utan, then according to Clark, at that moment in the child's life, the orang-utan actually reflects the *imago Dei* more perfectly. Nevertheless, because the child still displays some aspects of rationality, even if only the first signs of it, the child too cannot be denied to exist in the Image of God, even though it may be to a lesser degree. As the child matures, the resemblance he or she bears to Clark's idea of God will come to be more perfectly realized, until that child surpasses the level of divinity possessed by the orang-utan.

Biological relation is still important to Clark's understanding of humanity, however; because orang-utans, chimpanzees, gorillas, and the species *Homo sapiens* all

[142] Ibid., 124.

closely resemble one another, they share similar levels of intelligence and forms of behavior. If *Homines sapientes* tend to resemble God more than the members of any other animal lineage, and if other apes resemble *Homo sapiens* more than any other animal lineage, then other apes resemble God more than any other animal kind besides *Homo sapiens*. For Clark, relation to and descent from other human creatures offers a practical reason for asserting the human nature of a creature, though it is not an essential one. An intelligent tree, for example, possessing no animal ancestors at all, might be understood to be human, according to this idea. Clark is suggesting that we accept a trans-species hierarchy of humanity that never goes so far as to identify human nature with any particular species, but embraces a spectrum of images of God that extend across the entire living universe.

Even as creatures from the *Realgattung, Hominidea* are, in Clark's words, able to "ape the Divine" more fully than any other animal population, Clark also notes that in the species *Homo sapiens*, some individuals embody the Divine Reason of God better than others.[143] Clark would say that, though all *Homines sapientes* are human, people whom he designates to be "saints and sages" are the most human, as they more perfectly actualize the Divine Reason than the other members of their own species living alongside them.[144]

Clark's views ultimately turn him away from an Aristotelian view of nature and back toward a more Platonic understanding of the world. While Aristotle set rigid boundaries not only between the animal species of the world but also between humans

[143] Ibid., 123-124.
[144] Ibid., 123.

and non- humans, Plato saw no need to make such distinctions. As Clark says, referring to Plato's dialogue, *The Statesman*,

> "Plato, after all, denied that it was sensible to contrast human and nonhuman things, creatures of our specific kind and others. We might as well divide the universe into cranes and noncranes. By his account (or at least the account developed from his writings), there are indeed real natures, but they are not identical with the things that partly remind us of them. Even we ourselves are not wholly identical with the Form of Humanity, though we are called to serve it. The Form of Humanity is the divine reason, and we are indeed more human, in this sense, insofar as we think and do as the divine reason requires."[145]

If so many species share the same ancestors and so much in common physiologically, Clark is saying, then does drawing sharp distinctions between kinds really make any sense? Is one kind of creature really so different that we must separate it from all the rest of created nature? Can we understand such distinguished creatures apart from other related forms of life?[146] Rather than draw a line between human and non-human, and then attempt to determine the point at which creatures cease to be images of God, Clark would see all the life of creation differently. After all, if the spirit of God is everywhere, as Clark says, then every creature reflects God's nature,

> "in however tarnished a mirror. If we are apes, let us be apes together. If we are 'apes' (as aping the Divine), let us acknowledge what our duty is as would-be saints and give the courtesy we owe to those from among whom we sprang. Either we evolved along with them, by the processes described elsewhere, or else we evolved, in part, to imitate a Divine Humanity. Neither theory licenses a radical disjunction between ourselves and other apes. Either may give us reason to esteem and serve the greater humankind."[147]

2.5. Comparing Contemporary Understandings: van Huyssteen Revisited. The previous section offered Clark's somewhat revolutionary way of reconciling the

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[145] Ibid., 123.
[146] Ibid., 123.
[147] Ibid., 124.

understanding that human existence reflects the image of God in varying degrees through every species of animal. In light of this, the more traditional understanding of van Huyssteen's shall now be reconsidered. Through contrasting the two understandings, we shall attempt to determine whether or not van Huyssteen is justified in holding to a more traditional understanding of humanity, and whether or not it is reasonable to identify humanity exclusively with the animal species *Homo sapiens*.

The understanding of human nature presented by Clark is very different than that possessed by more traditional Western views. These traditional views typically attempt to identify humanity as something distinct and separate from all other forms of animal existence, in light of its divine origin. Clark's view is nothing if not inclusive, making great efforts to avoid *speciesism*, and extend the honor of human existence to as many forms of life as possible.

While both Clark and van Huyssteen believe in God and are even fellow Gifford Lecturers, both possess sharply contrasting understandings of human nature and the state of its existence in the world: Clark's view of human nature is simple and inclusive, while van Huyssteen's is specific and exclusive. The conception of human nature offered by van Huyssteen in Chapter One, together with the one arising from Clark's in this chapter, both appeal for the same reason: each is highly comprehensive, attempting to offer a clear understanding of what being human means. Both recognize Homo sapiens' animal nature and evolutionary history, and neither attempts to ignore that nature.

In light of these many similarities between *Homo sapiens* and other animal species, together with the nearly identical biological nature they all possess, emphasizing

any distinctions that set *Homo sapiens* apart may in the end be of no use to anyone attempting to understand human nature. This is certainly the case with Clark, who as we have seen would instead embrace the kindred nature present in every species of animal as a reason to assert its humanity. While not considering Clark specifically, van Huyssteen addresses a similar attitude to Clark's, before contrasting it with his own:

> "Precisely the fact that many other animals clearly have so much in common with humans has led some to conclude that it is more important to understand what unites us with rather than what divides us from closely related species. Yet others feel strongly that it is precisely the fact of human uniqueness that we need to define carefully. In reality, of course, these two interests are effectively identical, since we cannot understand whether we really are unique, and how unique we may be, without also knowing the full extent of what we share with our closest relatives."[148]

Van Huyssteen believes that even if *Homo sapiens* and other animal species possess nearly identical natures, if *Homo sapiens* are the only human species in the world, there will nevertheless be something that distinguishes them. Even if that distinction is a small one, it is significant because it allows for a human nature to exist alongside an animal nature. So while Clark would widen the boundaries of humanity to include other species outside the genus *Homo*, van Huyssteen prefers to restrict humanity solely to *Homo sapiens*.

Van Huyssteen, it may be recalled, summarizes his understanding of what *Homines sapientes* (and human beings) are through a list of attributes, including the species' status as the final surviving member of the genus *Homo*, the bipedal stance, the possession of a large and complicated brain, and through this possession the ability to

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[148] van Huyssteen, J. Wentzel. Alone in the World? Human Uniqueness in Science and Theology. (Grand Rapids: Eerdmans, 2006). 166.

think, plan, imagine, and create abstract symbols, art, and religion.[149] In addition to these attributes, van Huyssteen has more to say about the embodied aspect of humanity, in light of ethical and religious views analyzed in Alone in the World?:

> "vulnerability as human beings is complex precisely because we are multidimensional beings. As organic beings we are vulnerable to physical injury, disease, pain, and death. As social beings we are vulnerable to social incompatibility, social suffering, and oppressive social systems. We are vulnerable to the experience of suffering in very distinctive ways because we are personal, self-aware beings." [150]

Through his enthusiastic embracement of the idea that the body is essential for human existence, van Huyssteen notes while discussing MacIntyre that some mammals display capacities in their relationships that allow them to share much of what is necessary for human existence:

> "MacIntyre puts it well: our kinship to the dolphin and the chimpanzee is a kinship not only with the animality of the body, but also with respect to forms of life like the skills and social behaviors of our sister species in the animal world. Like dolphins and chimpanzees, we humans need social relationships to flourish."[151]

Because embodied animal nature is so important for human existence, it might seem possible that van Huyssteen will in the end be forced to make concessions that bring his view closer to Clark's, and see human nature reflected to some degree in other species besides *Homo sapiens*. Consider the examples offered in this chapter already such as Miles's language experiments with Chantek, or the recognition of *Homo sapiens*' membership in the *Realgattung, Hominidea* with other primate species. If other animals are of the same kind and possess the same significant abilities, then the assertion that

[149] Ibid., 317.
[150] Ibid., 301.
[151] Ibid., 287.

Homo sapiens is a wholly unique kind of creature has been effectively challenged. However, van Huyssteen's view is saved from being reduced to just another version of Clark's through the existence of one aspect that nevertheless remains particular to *Homo sapiens*: the capacity to possess religious thoughts, endure religious experiences, and the ability to have a relationship with God:

> "A careful analysis of Genesis 1:26-28 revealed that these verses recognize the primal human symbolically as the first human and as the significant forerunner of humanity, but more importantly as the link that defines the relationship between God and humanity. Against this background every human is created in the image of God, and these ancient texts are clear expressions of the uniqueness of human beings as walking representations of God on earth. In this ancient creation story we humans are seen as the culminating achievement of God: alone of all creatures, we are said to be made in God's image and invited into a personal relationship with God. In this very theological sense, then, we are indeed 'alone in the world'."[152]

While Clark described rationality as the way a creature lived in the image of God, van Huyssteen understands it to instead mean *relationality*. This idea, which van Huyssteen says is consistent with both the contextual cultural understanding and original intentions of the Old Testament authors,

> "does not necessarily imply that nature as a whole should now be seen as created in the image of God, but for theological reasons that are fair and compassionate, limits the notion of the *imago Dei* to *Homo sapiens*."[153]

This is perfectly in accordance with what Ratzinger more simply stated in his homily on human nature: "They are most profoundly themselves when they discover their relation to their Creator."[154]

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[152] Ibid., 314.
[153] Ibid., 322.
[154] Ratzinger, Joseph. In the Beginning: A Catholic Understanding of the Story of Creation and the Fall, trans. Boniface Ramsey (Grand Rapids: Eerdmanns, 1995). 48.

Thus, while van Huyssteen acknowledges *Homo sapiens'* connection to nature and other forms of life, his view emphasizes different aspects of the nature of *Homo sapiens* than Clark's. According to van Huyssteen, a natural capacity for a religious understanding of the world sets *Homo sapiens* apart from other creatures in a way like nothing else.[155] This religious capacity is significant because of the non-empirical nature of the objects of religion. Divinity, if it exists, does so beyond the natural world, outside of physical experience and the sense perception which both *Homo sapiens* and other animals employ to survive and thrive in the world. Nevertheless, these objects continue to be beheld, felt, and experienced by species able to "code the nonvisible", in van Huyssteen's words, and offer an interpretation of that experience.[156] The stunning Lascaux cave paintings left by the ancient inhabitants of what is today southwestern France testify to the presence of this capacity in *Homo sapiens* hundreds of thousands of years ago, and its importance in the lives of the people who created them: [157]

> "Within a shamanistic context the Upper Paleolithic subterranean passages and the chambers were therefore places that uniquely provided the opportunity for close contact with, and even penetration of, a very specific spiritual tier of the cosmos. And this hallucinatory, spiritual world, exemplified by its painted and engraved imagery, was thus invested with materiality and was precisely situated cosmologically. It certainly did not exist merely in human minds; the spiritual world was there, tangible and material, and some could empirically verify it by entering the caves and seeing for themselves the 'fixed' visions of the spirit animals that empowered the shamans of the community."[158]

These attempts to touch the world beyond continue to this day: consider the *Cro-Magnon* shaman just described by van Huyssteen, working by torchlight deep in a cave in

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[155] van Huyssteen, J. Wentzel. Alone in the World? Human Uniqueness in Science and Theology. (Grand Rapids: Eerdmans, 2006). 312.
[156] Ibid., 268.
[157] Ibid., 209- 212, 250-256.
[158] Ibid., 250-251.

Lascaux, and then consider artist Adolf Hyla in the years following World War II, re-creating the vision of St. Faustina Kowalska in his painting of the Divine Mercy. Each displays in his own time and cultural context a parallel expression of the same capacity, a power that separated his species from the rest of nature as much today as it did 40,000 years ago.

Of course, van Huyssteen remains open to criticism by Clark, in light of one of his important observations. Clark understands that there were no separate species among the taxonomic family *Hominidae*, but only a range of superficially differing populations. Proposing instead that we consider the entire group of higher primates, orang-utans and chimpanzees, gorillas and *Homo sapiens*, to be varying populations of a single kind, Clark challenges Homo sapiens to abandon its cultural tendency to separate itself from and deny its animal nature.[159] Though he acknowledges *Homo sapiens*' relation to other animal species, van Huyssteen does not consider this problem as he asserts the human uniqueness of *Homo sapiens* alone. He also fails, in light of Clark's observation that some animals exhibit more intelligent behavior than some very young or handicapped *Homines sapientes*, to consider why young or disabled members of the species should still be considered human. Also, the failure of very young or disabled *Homines sapientes* to pray or understand such theological ideas of God is never addressed. These questions shall be considered in the next chapter.

Leaving these questions behind for a moment, we shall accept van Huyssteen's understanding in order to consider the sort of God he understands human beings to exist

[159] Clark, Stephen R.L. "Apes and the Idea of Kindred." The Great Ape Project: Equality Beyond Humanity, eds. Paola Cavalieri and Peter Singer. (New York: St. Martin's Press, 1993). 114-118.

in the image of. The understanding that *Homo sapiens*' humanity lies in its ability to have a loving relationship with God allows van Huyssteen to assert that of all the intelligent species of animal alive on the earth, only *Homo sapiens* is able to be accurately described as human. Therefore, it is not intelligence or the ability to reason that allows a creature to exist in *imago Dei*, but the ability to love as God loves. The following section shall consider two of the consequences of this realization: that God is not primarily a rational mind, as Clark describes, but a loving person.

2.6. The Relational Idea of God: Bernard Lonergan, S.J. The following section shall investigate the understanding that God is primarily relational, together with van Huyssteen's claim that *Homo sapiens* is unique in its ability to exist in a relationship with divinity. This shall be done by examining Jesuit philosopher and theologian Bernard Lonergan's understanding of how human beings came to experience God in their lives.

According to Bernard Lonergan, the first human awareness of God comes not through reasonable deduction of first causes, but through an overpowering feeling of love, subjectively experienced by the individual.[160] One constantly recurring aspect of human life, Lonergan says, present throughout the history of *Homo sapiens*, is the phenomenon of religious experience.[161] Lonergan believes that religious experiences allowed *Homo sapiens* to know divinity long before philosophers such as Aristotle deduced the existence of any kind of uncaused first cause.[162]

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[160] Lonergan, Bernard. Philosophy of God and Theology. (Philadelphia: Westminister, 1973). 54.
[161] Ibid., 54.
[162] Ibid., 55.

Lonergan is not alone in his belief. Similarly, philosopher of religion and pluralistic theologian John Hick has noted that while there exist and have existed countless religious traditions throughout human history, the love of God has always been at the heart of each, and has always inspired all of humanity to find hope in its salvation.[163] The Jewish philosopher Martin Buber also understood relational experiences to be the only way through which God makes Himself known to earthly human beings.[164] Lonergan concurs with both Buber and Hick when he notes that for all the varieties of human culture influencing those experiences as they occur to individuals, one aspect remains fundamental and universal:

> "Underneath the many forms and prior to the many aberrations some have found that there exists an unrestricted being in love, a mystery of love and awe, a being grasped by ultimate concern, a happiness that has a determinate content but no intellectually apprehended object. Such people will ask, With whom are we in love? So [...] there arises the question of God."[165]

Lonergan notes that all theology and religious understandings of God are rooted not in philosophical understandings, but in religious experience.[166] While philosophy's task may be to analyze a culture's belief in God and the reasons for it in order to understand it, religious experience always underlies it, and it is through religion that the idea of God is principally conveyed to the world up to the present time. Moreover, Lonergan observes, a philosophy of God requires a cultural atmosphere rich in religious awareness in order to flourish. The relational nature of God is the foundation underlying

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[163] Karkkainen, Veli-Matti. The Doctrine of God: A Global Introduction. (Grand Rapids: Baker Academic, 2004). 161.
[164] Buber, Martin. I and Thou, trans. Walter Kaufmann. (New York: Touchstone, 1970). 160-168.
[165] Lonergan, Bernard. Philosophy of God and Theology. (Philadelphia: Westminister, 1973). 54.
[166] Ibid., 55.

all other ways in which the divine is understood to exist and how it is to be described.[167]

The human experience of the love of God, which is for Lonergan prior to all other ways of knowing Him, reveals to us God's existence to be most fundamentally a personal one. Lonergan believes this is because of God's demonstrated ability to relate, and he states that personhood results from relationships:

> "From the 'we' of the parents comes the symbiosis of mother and child. From the 'we' of the parents and the symbiosis of mother and child comes the 'we' of the family. Within the 'we' of the family emerges the 'I' of the child. In other words the person is not the primordial fact. What is primordial is the community."[168]

According to this understanding, God is not primarily rational or an ultimate mind, but instead a loving person, relational and extending His love beyond Himself to creatures capable of recognizing His offering and returning it back to Him. Both Judaism and Christianity demonstrate a similar understanding; though He wore many masks, acting at times as a warrior, judge, king, shepherd, or husband, the God of the Old Testament was most certainly relational. His covenant with the Israelites (a unifying relationship, like a marriage) served as the ultimate example of this aspect of His nature.[169] The New Testament cast an additional light on the Old Testament understanding of God with the revelation that God is a loving father, indicated by Jesus with the intimate address, *abba* ("daddy").[170]

In a statement that van Huyssteen would most assuredly agree with, Lonergan says that the knowledge of God results from an experience of the love of God, felt

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[167] Ibid., 55.
[168] Ibid., 58.
[169] Karkkainen, Veli-Matti. The Doctrine of God: A Global Introduction. (Grand Rapids: Baker Academic, 2004). 27-29.
[170] Ibid., 41.

"with all one's heart, with all one's mind, with all one's soul, and with all one's strength, and from it flows the love on one's neighbor as one's self."[171]

The Trinitarian understanding of God found in Christianity describes a loving relationship between a Father, His Son, and a third person, the Love itself.[172] This understanding, St. Thomas Aquinas recognized, arose not through philosophical reason, but through a revelation by God, allows for God to exist in a personal relationship within the divine nature prior to the emergence of human beings in His Creation.[173] This eternal relationship, existing before the universe was made, demonstrates how the love and personhood of God is the source of all love and relations found on the earth, for they were created in the image of this personhood. In *imago Dei.*

It might be understood, then, that human animals are unique among their sister species, for they alone are aware of the source of their loving relationships. Human animals alone have been granted the ability to directly know the Lover who called them and all the rest of the world into being. Because theology tells us God exists in three persons united in a single familial relation, God knows and loves God. Because human beings also know and love God, they resemble God in a way that no other animal species in Creation does.

2.7. Conclusion. The purpose of this chapter was to investigate the nature of human nature, with two purposes in mind. The first was in order to determine first whether or not humanity could be understood to exist in more than one species. The second was to understand how a human nature reflects the image of the God who created it. What

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[171] Ibid., 58.
[172] Hahn, Scott. First Comes Love. (New York: Image, 2002). 42-43.
[173] Aquinas, St. Thomas. Aquinas's Shorter Summa [Compendium of Theology], trans. Cyril Vollert, S.J. (1947; Manchester: Sophia Institute, 2002). 35.

unites the two questions and allows us to investigate them together is a third question: the question of the nature of God. Understanding God as a mind, such as the Divine Reason described by Clark, offers us one answer to the question of what kind of creature "apes the divine" and imitates God. On the other hand, understanding God as a Lover in a community of love offers us quite another.

Only how one understands God will determine whether the rational God described by Clark or the personal God described by Lonergan and van Huyssteen will be chosen as the God *Homo sapiens* more perfectly imitates. A Christian philosopher would, it certainly seems, choose the second understanding, for his or her faith depends on the existence of a God able to reach out to the world and call it to be in a loving relationship with Him. If our faith, historical milieu, and cultural context take us along this path, then we have found a way in which *Homo sapiens* is a unique species. If the ability to have loving relationships, knowledge of God, and the power to imitate God are what make *Homo sapiens* a human species, then humanity cannot be said to be possessed by individuals from species lacking the ability to know God.

This realization leads to at least two troubling questions. The first follows from Clark's assertion that all apes, including chimpanzees, gorillas, and *Homo sapiens*, are not really separate species at all. If all the "great apes" are, beneath their superficial, external features, really all members of the same kind, the uniqueness of one population over another becomes more difficult to rationalize. If we cannot really be sure that *Homo sapiens* are a separate and distinct group to begin with, how can we follow van Huyssteen in saying that *Homo sapiens* is the sole possessor of human nature?

The second troublesome question also has to do with identifying *Homo sapiens* as the only human species of creature in the world: even if *Homo sapiens* are the only species existing in *imago Dei*, how can we defend the humanity of *Homines sapientes* that are unable to exhibit loving or religious behavior? Consider the handicapped, the very young, or those suffering from illnesses such as autism. Though incapable of expressing the behavior that demonstrates an individual to be a human being, very few would deny these individuals to be human. To assert their humanity without questioning the strictly animal nature of intelligent, language-using species such as orang-utans seems problematic. Lord Monboddo asserted that speech was not necessary for humanity. Could it be the same case with religious behavior, after all? These questions shall be considered in the following chapters.

Chapter Three – The Biological and Spiritual Uniqueness of *Homo sapiens.*

The first two chapters have suggested that even though human life depends on, and is rooted in, a biological animal nature, *human* nature is something more: it rests in the ability to experience a relationship with God, an awareness of supernatural reality, and the use of religious behavior to engage and interact with this other reality. It might seem, however, that van Huyssteen almost too neatly and easily asserts that humanity is only to be found in *Homo sapiens.*

Even though all mammals may share, in varying degrees, a bodily existence, social habits, and cognitive abilities, it has been noted with van Huyssteen that only members of the species *Homo sapiens* display a capacity for religious behavior. Unfortunately, as young children and the mentally handicapped demonstrate, not every member of the species *Homo sapiens* necessarily displays religious behavior. Also, as Clark pointed out, *Homo sapiens* may not be as biologically distinct from other species of mammals as those of its kind tend to believe. In this chapter, I shall attempt to consider the challenges facts such as these offer us in my attempt to understand *Homo sapiens* as a uniquely human species, created in *imago Dei.*

3.1. The Problem of Species. The problem of species is an important one to consider when attempting to determine what sort of uniqueness is possessed by Homo sapiens. The methods through which species are determined taxonomically may vary, depending on the scientific field doing the classifying or the cultural attitude of the classifier.[174]

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[174] Dupré, John. "Are Whales Fish?." Folkbiology, eds. Douglas L. Bedin and Scott Atran. (Cambridge: The MIT Press, 1999). 466-467. *Dupré suggests in his essay that no perfectly ideal way exists to classify animal life. This is because the reasons for, and the methods by which, animal life is classified vary from*

When considering paleontology and long-extinct animals, the amount of time being considered may also affect the way species are understood.

The question of whether or not species even exist was suggested in the essay by Richard Dawkins, considered preceding chapter. Dawkins recognizes all forms of animal life to be a part of a single, enormous, ring species, punctuated only by the arbitrary extinctions of the individuals bridging one interbreeding group with another.[175] A slightly weaker view of this idea comes from Clark, who proposed that though extinctions have left our world with numerous kinds of animals, the boundaries encompassing those kinds may actually be wider than most Homo sapiens tend to believe.[176] Speculating, it may be recalled, that because greyhounds and chihuahuas are of the same species,[177] in spite of the physiological differences distinguishing them, Clark wonders if the same might be true of Homo sapiens and chimpanzees. Such speculations are not limited to the animal world, but also to the ways botanists classify plants.[178]

We also read in the last chapter Clark's suggestion that *Homo sapiens*' distinction as a separate species from other primates might have more to do with a cultural anthropocentrism than an actual biological difference. This possibility offers a further reason to question drawing a line between *Homo sapiens* and other organisms. Even

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one discipline of study to another. Biology and ecology, for example, each understand marine life in very different ways.

[175] Dawkins, Richard. "Gaps in the Mind." The Great Ape Project: Equality Beyond Humanity, eds. Paola Cavalieri and Peter Singer. (New York: St. Martin's Press, 1993). 84-85.
[176] Clark, Stephen R. L. "Apes and the Idea of Kindred." The Great Ape Project: Equality Beyond Humanity, eds. Paola Cavalieri and Peter Singer. (New York: St. Martin's Press, 1993). 117-118.
[177] Ibid., 117.
[178] Chase, Mark. W., and Yohan Pillon. "Taxonomic Exaggeration and Its Effects on Orchid Conservation." *Conservation Biology*, 21.1 (February, 2007): 263-265. *This article notes that the popularity of orchids in Europe has led to to the identification of many invalid species. Because orchid taxa are being poorly circumscribed more frequently in Europe than in other parts of the world, the conservation of rarer and less-well known species of orchid may be threatened.*

while *Homo sapiens* may be identifiable as a specific enough group of organisms, and even if a capacity possessed by no other creature can be found among members of the species *Homo sapiens*, a satisfying case has not yet been made for asserting *Homo sapiens*' uniqueness for a number of reasons. First, if little differentiates *Homo sapiens* from other primate species, as Clark notes, and if chimpanzees and orang-utans have so far failed to demonstrate the capacity for religious relationships that most members of the species *Homo sapiens* possess, then what can be said of *Homines sapientes* who fail to exhibit this religious capacity? Are they still human, and if they are, then why not consider other primates to be for the same reason?

While Clark's broad understanding of human nature offers us an answer to this question, that answer will not satisfy anyone who has religious reasons to believe human nature exists only in *Homo sapiens*.

The following sections shall attempt to demonstrate that the surviving members of the species *Homo sapiens* possesses a biological uniqueness that sets it apart from other species comprising the *Realgattung* which Clark referred to as "greater humankind".[179] This shall be done first by embracing the fact that *Homo sapiens* shares an extremely close relation with other primate species, before offering reasons to support the belief that *Homo sapiens* nevertheless exists apart from them as well.

3.2. Looking for a Biological Uniqueness: the Challenge. The taxonomic family *Hominidea* has, over the course of the past twenty million years until the present day,

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[179] Clark, Stephen R. L. "Apes and the Idea of Kindred." The Great Ape Project: Equality Beyond Humanity, eds. Paola Cavalieri and Peter Singer. (New York: St. Martin's Press, 1993), 123.

evolved into four distinct genera of animal kinds.[180] The species belonging to the genera *Pongo*, *Gorilla*, *Pan*, and *Homo* (orang-utans, gorillas, chimpanzees and bonobos, and *Homo sapiens*) slowly evolved into separate kinds within one larger family, each linked by many generations of intermediaries. Because all these species are descended from the same ancestors, it is still possible to view all of them as a single kind of creature. This is exactly what Clark does.[181]

In an essay discussing what he believes to be the mistake of identifying humanity only with *Homo sapiens*, anthropologist R. I. M. Dunbar discusses the behavioral similarities chimpanzees share with *Homo sapiens*, in addition to their physiological resemblance:

> "[T]he chimpanzees share with us a number of physiological characteristics that have not been found in other species. One of these is the ability to engage in pretend play; another is to be able to see the world from another individual's point of view. Some human beings (namely autistic individuals) lack both these abilities, yet we are happy to treat them (quite rightly, of course!) as human. How much more deserving then must be the chimpanzee's case for equal treatment!"[182]

From a scientific point of view, then, if considering both biology and intelligent behavior, it can be reasonably claimed that both *Homo sapiens* and chimpanzees are set apart from one another only by superficial differences. This can be done in light of the fact that the DNA of the two species differs genetically by less than 1.6 percent. The biological natures of both species are almost nearly identical, as are their ancestral

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[180] Diamond, Jared. The Third Chimpanzee: The Evolution and Future of the Human Animal. (1993; New York: Harper Perennial, 1993). 96.
[181] Clark, Stephen R. L. "Apes and the Idea of Kindred." The Great Ape Project: Equality Beyond Humanity, eds. Paola Cavalieri and Peter Singer. (New York: St. Martin's Press, 1993). 116.
[182] Dunbar, R. I. M. "What's in a Classification?" The Great Ape Project: Equality Beyond Humanity, eds. Paola Cavalieri and Peter Singer. (New York: St. Martin's Press, 1993). 110. *Dunbar, it should be noted, seems ignorant of Miles' work with Chantek the orang-utan. However, acknowledging Miles's work would have only strengthened Dunbar's argument further.*

histories.[183] The higher primate species surviving today remain extremely closely related, as evidenced by the short genetic distances separating each: a mere 0.7 percent difference distinguishes the DNA of chimpanzees and bonobos from one another, while a 3.6 percent difference separates the orang-utan from the chimpanzee. Chimpanzees, it should also be noted, are more closely related to *Homo sapiens* than they are to either orang-utans or their fellow-African cousins, gorillas.[184] Put this way, 98.4 percent of *Homo sapiens*'s genes are, "just normal chimp genes".[185]

Yet in spite of these scientific facts, I nevertheless wish to demonstrate that the members of the species *Homo sapiens* share a significant difference from their fellow primate species. If a biological fact may be found that allows us to identify *Homo sapiens* as a species truly set apart from other species in the taxonomic family *Hominidea*, then we shall have a reason to abandon the claim of both Clark and Dunbar that all primate species are ultimately simply members of the same kind. This shall be done by examining the biological relationship uniting the surviving members of the species.

3.3. Looking for a Biological Uniqueness: The *Family Homo sapiens*. In his essay, "What's in a Classification, " Dunbar tells us:

> "The biological reality is that the great apes are just populations of animals that differ only slightly more than their degree of genetic relatedness to you and me than to other populations of humans living elsewhere in the world. They just look

[183] Diamond, Jared. The Third Chimpanzee: The Evolution and Future of the Human Animal. (1993; New York: Harper Perennial, 1993). 95.
[184] Ibid., 95-96.
[185] Ibid., 95.

> a bit different to those other populations we call 'human', but not all that different, and by no means as different as, say, spiders do."[186]

Dunbar acknowledges, together with others such as Clark, the tendency of *Homo sapiens* to separate themselves from other primate species, in spite of their nearly identical biological natures. One of the reasons explaining this tendency, he proposes, is rooted in close physiological resemblance shared by all *Homines sapientes*, regardless of what part of the world they might come from:

> "This remarkable similarity between humans may help to explain why we draw the line so tightly around ourselves. In trying to differentiate between 'them and us', we observe that the differences in appearance between members of our own family and other humans from all parts of the world is relatively small compared with the apparent gulf between ourselves and those species that seem to be most similar to us (namely, chimpanzees and gorillas)."[187]

Even though generations spent living on different continents and regions fostered superficial physical distinctions between some populations within the species *Homo sapiens*, Dunbar notes that *Homines sapientes* nevertheless share more in common both genetically and physiologically with each other than any other species on the planet.[188] This similarity is easily explained when considering the relatively brief history of *Homo sapiens*: the species first appeared as little as 500,000 years ago.[189] More than this, all members of the species *Homo sapiens* surviving today share an even more recent point of origin: a common female ancestor who lived just 150,000 years ago (or, as Dunbar notes, "a mere 5,000 human generations ago!").[190] The fact that every surviving member of the species *Homo sapiens* shares such a recent common ancestor means, Dunbar says, that all

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[186] Dunbar, R. I. M. "What's in a Classification?" The Great Ape Project: Equality Beyond Humanity, eds. Paola Cavalieri and Peter Singer. (New York: St. Martin's Press, 1993). 111-112.
[187] Ibid., 112.
[188] Ibid., 112.
[189] Ibid., 112.
[190] Ibid., 112.

Homines sapientes not only physically resemble one another more than any other organism, but are more closely related to one another than are all the chimpanzees or gorillas in the world.[191] As a result, the resemblance uniting all *Homines sapientes* is not only the result of their membership in the same species, but their membership in the same family.

While *Homo sapiens* may be part of the taxonomic family of *Hominidea*, together with other primate species, *Homines sapientes* can also in their present state be understood to be of one family more than any other primate species. It should, however, be noted that this unique relationship among the members of the species *Homo sapiens* was not always the case. The common female ancestor of all surviving *Homines sapientes* is, for example, not to be understood as exactly identical to the biblical Eve simply because she was not the first woman. The *Mitochondrial Eve*, as she has come to be called,[192] would have been herself a daughter, granddaughter, and great granddaughter of other women who lived before her, during a time when not all *Homo sapiens* shared a single common ancestor. As Michael Ruse notes, using an analogy:

> "I am descended from my great grandmother, as is my sister, but we are descended from seven other people as well. This is not the way of the literal Adam and Eve story of Genesis."[193]

Biologically speaking, then, *Homo sapiens* was no different from other primate species in this regard before the life of this particular woman. During the subsequent generations following her life, as this woman's children mated with other members of the *Homo*

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[191] Ibid., 112.
[192] van Huyssteen, J. Wentzel. Alone in the World? Human Uniqueness in Science and Theology. (Grand Rapids: Eerdmans, 2006). 66.
[193] Ruse, Michael. Can a Darwinian Be a Christian?: The Relationship Between Science and Religion. (Cambridge: Cambridge, 2001). 76.

sapiens population, the entire species came to be united together as a single family. Because of a single shared ancestor, *Homines sapientes* possess a unity that genetically ties together all its members more closely than those of any other primate species, as well as sharing between themselves more physiological similarities. Because they are all the children of the children of the Mitochondrial Eve, the surviving *Homines sapientes* enjoy a unique familial relation that sets them further apart from the members of all other similar species on the planet. Clark, as we saw in the last chapter, presents the idea that *Homo sapiens* is really an indistinct group within a larger group of other indistinct groups of primates.

The idea that *Homo sapiens* presently exists as a single interrelated population descended from the same individual ancestor offers us a reason to assert the species' biological uniqueness after all. In light of this, I shall from this point on refer to the communities of presently- surviving *Homines sapientes* today as the *Family Homo sapiens*. I understand the *Family* to be a distinct population within the *species Homo sapiens*, a group which once included the now-extinct populations of *Homo sapiens* that were not a part of this family.

In addition to the biological uniqueness this relation gives the *Family Homo sapiens*, it may also provide a possible reason to assert that the attributes deemed necessary for both personhood and humanity are present in all surviving *Homines sapientes*, regardless of whether or not they are obvious. It may be the case that a child or a handicapped *Homo sapiens* may fail to use language or exhibit signs of both self-awareness or religious behavior. Nevertheless, the fact of the close relation and the

significant biological resemblance all *Homines sapientes* possess offer reasons to suspect that the ability to display a human nature is nevertheless always present, even if it is hidden by some physical or developmental immaturity or impairment.

While some may be satisfied by this, for others, the observable fact of an adult orang-utan's ability to demonstrate intelligent behavior might be more significant than the unproven possibility of a very young child's potential to do so. As a result, they would still be skeptical of any attempt to prove the humanity of the young child as stronger than the humanity of an orang-utan. The same would also be true of Clark, as we have read in the previous chapter. Clark, it may be recalled, through equating human nature with the possession of intelligence, believed himself able to describe animals as more or less human depending upon the intelligence they each displayed. While being related to typically intelligent species might make the future human existence of a newly-conceived creature more likely, membership into a certain biological kind does not absolutely guarantee humanity, in Clark's mind.

In this section, a unique biological relationship has been identified that allows us to proclaim a physiological uniqueness for the *Family Homo sapiens*. However, in light of the difficulty faced by defenders of the humanity of both unborn children or the handicapped, who cannot demonstrate "human" behavior to be possessed by either, it must be considered whether or not science provides all the proper methods of investigating the phenomenon of human uniqueness, at least as far as situations where the humanity of an organism is unobservable and questionable. In the following section, one thinker will attempt to explain all of human nature through one method of study,

attempting to accept both scientific and theological understandings simultaneously. His success might offer an answer to the challenge facing those who would defend the humanity of the young, ill or disabled.

3.4. An Attempt at Reconciliation: Michael Ruse. Michael Ruse makes an explicit attempt to reconcile the Genesis accounts of the origin of humanity with the paleontological record, hoping to uncover an historical process that can be shown to correspond with a theological understanding of how the human *Family* emerged out of the animal *species Homo sapiens*. He does this even in spite of Ratzinger's claim that the two disciplines of science and theology describe different truths, a belief that allows both understandings to separately coexist. Van Huyssteen says, on the other hand, that a view able to make use of both points of view simultaneously will be more satisfying for someone seeking a fuller understanding of human nature.

Ruse faces a difficult task, as he is committed to a naturalist understanding of human nature. Though opposed to van Huyssteen in this regard, Ruse's attempt nevertheless offers us some valuable ideas that help us to better understand the nature of human nature, and what makes *Homo sapiens* a theologically unique species. Ruse's refusal to accept anything but a naturalistic Darwinian understanding of human nature, however, means that he will inevitably reach a conclusion that is both quite different from van Huyssteen's. His thoughts will nevertheless be considered, for the ideas he chooses not to consider have some important things to tell a multidisciplinarian open to different understandings of how human beings originated.

Ruse begins his attempts to reconcile scientific and theological views of human nature into one single discipline at the very beginning, going back to the opening chapter of Genesis and attempting to view a Darwinian understanding in light of it. He notes that the theological understanding that the human *Family Homo sapiens* descended from one original couple seems the most troubling to those who would attempt to reconcile Christianity with evolution and biological science.[194] Some would accept the story of Adam and Eve to be entirely symbolic; van Huyssteen, as mentioned, offers the suggestion that Adam and Eve simply represent the first group of hominids to exhibit religious awareness and behavior.[195] The book of Genesis tells us that human life began when God "breathed" His spirit into the physical form of Adam. If one insists that the divine life of God entered into particular members of an already existing species at a certain moment in time, then we may have found an explanation that is really quite compatible with the theological account offered in the book of Genesis. Unfortunately, Michael Ruse finds difficulty in accepting such a position, as far as science is concerned. He says that it is possible that God introduced intelligence into a particular pair of *Homines sapientes* simply by divine edict, therefore leaving any further need for explanation irrelevant.[196] However, to have the transition from animal to human occur in this way seems calls into question the nature of this first couple's most immediate ancestors, as Ruse notes:

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[194] Ruse, Michael. Can a Darwinian Be a Christian?: The Relationship Between Science and Religion. (Cambridge: Cambridge, 2001). 75-76.
[195] van Huyssteen, J. Wentzel. Alone in the World? Human Uniqueness in Science and Theology. (Grand Rapids: Eerdmans, 2006). 146.
[196] Ruse, Michael. Can a Darwinian Be a Christian?: The Relationship Between Science and Religion. (Cambridge: Cambridge, 2001). 76.

> "Darwinian biology suggests that intelligence (and as we shall see, related freedom and moral awareness) would be possessed by the parent generation and the contemporary generation and those of the next generations not descended from the pair. So on what basis can we declare them not to have been made in God's image?"[197]

As a result of this question, Ruse claims to have reached a dead end in his attempt to harmonize these two understandings of the origin of humanity, forcing him to investigate other, less orthodox explanations of the origins of human nature, as we shall see below. Ruse ends up conceding that a reductionist view of reality like Darwinism cannot lead one to a non-reductionistic view such as Christianity without making what he describes as an ontological leap "in the presence of an ontological difference", here citing Pope John Paul II.[198]

In light of what we have covered in the preceding chapter, we might observe Ruse's error: his viewing of intelligence as the defining feature of human nature. Together with this, he proposes that human beings exist in *imago Dei* because they are intelligent as God is intelligent. As noted in the last chapter, intelligence and rationality can be found in other species besides *Homo sapiens*, not only in other primates such as chimpanzees, but in less closely related mammals such as dolphins.[199] While the intelligence of other mammals may not be equal to that typically possessed by *Homo sapiens*, it can be, especially if considering individuals who are very young or mentally impaired. In cases such as these, animals such as Chantek can actually surpass young or handicapped *Homines sapientes* in terms of intellectual ability, validly raising the question of who should be considered more human. We may recall Clark's attempt to

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[197] Ibid., 76.
[198] Ibid., 77.
[199] MacIntyre, Alasdair. Dependant Rational Animals. (Chicago: Open Court, 1998). 21-28.

blur the boundaries of humanity by not tying it to every member any one particular primate population. But if intelligence is not the ultimate means through which an animal lives the life of God in the world, then Ruse's objection to Genesis in light of Darwinian science ("on what basis can we declare them not to have been made in God's image?"[200]) is less problematic. So long as members of the *Family Homo sapiens* know God and strive to live in imitation of the divine life, then the life of God, in the words of Lonergan, "flows the love on one's neighbor as oneself," entering the world through loving relationships.[201]

Ruse errs a second time by misidentifying the external signs of the fruits of the life of God with an intangible force or power knowable only through theological investigation. Understanding intellect to be the means through which humanity resembles God, he understands that the human soul must be a "thinking reality". The question has already been proposed whether or not mentally handicapped or very young *Homines sapientes* are understood to be human beings, regardless of how well they are able to think. Could the same be true of religious awareness and behavior? Could a member of the *species Homo sapiens*, one mentally incapable of comprehending the existence of supernatural realities due to some impairment or illness, be denied to exist as a human being?

Though we can accept, in light of van Huyssteen's understanding of what human beings are, that religious awareness and behavior are signs of human life, we need not believe that a capacity for religious behavior alone make an individual human. To do this

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[200] Ruse, Michael. Can a Darwinian Be a Christian?: The Relationship Between Science and Religion. (Cambridge: Cambridge, 2001). 76.
[201] Lonergan, Bernard. Philosophy of God and Theology. (Philadelphia: Westminister, 1973). 59.

would be to fall victim to the same mistake Ruse commits. If religious behavior exists because an unobservable, supernatural aspect already resides within the creature, an object of theological and not scientific knowledge, then we may understand that a divine spiritual aspect is what ultimately underlies human nature. Religious behavior, we realize, is really just a possible *consequence* of human existence, and not the *cause* of human existence in an animal.

This of course leads both to the question of the nature of this spiritual aspect, as well as how it historically came to reside within the members of the *species Homo sapiens*. In considering the nature of the human soul, Ruse tells us that there are two ways of understanding it in the Christian tradition:

> "One is a kind of Augustinian position, in turn Platonic, which sees the soul as something more or less distinct, in a substance sense, from the body. Augustine depends strongly on the reading of 'breath', a physical thing, in his exegesis of Genesis: 'God fashioned man out of the dust of the earth and gave him a soul ... This he did either by implanting in him, by breathing on him, a soul which he had already made, or rather by willing that the actual breath which he produced when he breathed on him should be the soul of the man. For to breathe is to produce a breath.' [...] However, this is not the only position for the Christian, nor even today is it the official Catholic position. The official position rather is that of Saint Thomas Aquinas, and he was heavily influenced not by Plato but by Aristotle. And never more so, given the influence of *De Anima*, than in his discussion of the soul. For Aristotle/Aquinas, the human soul - identified with the intellectual faculty, which makes a human being a living human being - is not a thing, in the sense of a material substance. It is rather much more a principle of ordering or what, in Aristotelian terms, is called the 'form'. It is something real and can act as a kind of cause - Aquinas speaks of 'actuating', but it is not a substance."[202]

Ruse forsakes the dualistic Augustinian conception of body and soul as separate substances. Preferring a more naturalistic point of view, Ruse finds more promise in

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[202] Ruse, Michael. Can a Darwinian Be a Christian?: The Relationship Between Science and Religion. (Cambridge: Cambridge, 2001). 80.

Aquinas' understanding of the human soul as the ordering of biological information which allows *Homo sapiens* to exist in an intelligent way. The structure possessed by *Homo sapiens* that allows the species to live and move and think, Ruse understands, is therefore also what makes the species unique:

> "All organisms have souls as such: this is what makes them living. Only humans have 'intellectual souls.' This is the image of God."[203]

Unfortunately, this leads to a problem Ruse is unable to pass over: the theological notion of *traducianism*, which he describes as the understanding that the human soul is passed onto human children through their parents.[204] One of the primary champions of this idea was St. Augustine, who understood it to serve as the method through which the sin of Adam was passed on to his descendants.[205] If traducianism is the case, Ruse says, and if we are to incorporate this idea into Darwinism, then it follows that that a primitive sort of human soul was to some degree present in *Homo sapiens*' earliest ancestors, and that it developed into a fully human soul as the species evolved.

It should be noted that Ruse is offering a modified version of St. Augustine's understanding, which both accepts that human nature is passed on from parent to child, but also that human nature developed slowly through a process of spiritual evolution. Thus both physical and spiritual realities were (and are) subject to evolutionary processes.

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[203] Ibid., 81. *It should be noted that Ruse is using the word "soul" in the Thomistic sense, as a synonym for "form".*

[204] Ibid., 77.

[205] Hill, Jonathon. The History of Christian Thought. (Oxford: Lion Hudson, 2003). 85-86.

It might also be noted that traducianism, at least the version Ruse considers ascribing to, also has much in common with Aristotle's understanding of the three kinds of living soul, but goes further than Aristotle by describing a continuous array of intermediary degrees between each stage. It may also be noted the similarity such a view has with Clark, who described a continuum of more-or-less human souls within a number of interrelated species.

The biological continuity of evolution and the spiritual continuity of traducianism suggests a natural progression from animal to human nature, a continuity that allows for a number of intermediary species to share in the divine life by virtue of their intellectual similarity to *Homo sapiens*. Yet as Ruse notes,

> "Unfortunately, this belief or escape route [traducianism] runs afoul of another part of Christian theology--Catholic theology at least--namely that animals, though alive, do not have (rational) souls. They do not mirror the divine. [...] We seem to have reached an impasse."[206]

Though it leads to an ontological disjunction between *Homo sapiens* and other primate species, including the surviving *Family Homo sapiens*' most immediate ancestors, the only solution to Ruse's impasse is to reconsider the Platonic model he abandoned. Though it is not possible for a scientific naturalist such as Ruse to accept this (if he wishes to remain a naturalist), it seems to be the only way to avoid the problems he mentions without drastically compromising theological understandings of human creation and nature.

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[206] Ruse, Michael. Can a Darwinian Be a Christian?: The Relationship Between Science and Religion. (Cambridge: Cambridge, 2001)., 77.

As we have now seen, equating intelligence with the human soul inevitably leads to an irreconcilable conflict between asserting a strong human uniqueness for *Homo sapiens*, while acknowledging the characteristics *Homo sapiens* shares with other animals. This is especially apparent when we confront examples of intelligent behavior in other forms of animal life.[207] Understanding the attribute that allows human beings to exist in *imago Dei* to be as empirically unobservable as its divine source eliminates this problem.

3.5. The Limits of Science and a Place for Theology. Pope John Paul II says in a 1996 address that while the ultimate component of human nature, its spiritual aspect, came to be a part of humanity at a certain point over the course of *Homo sapiens*' biological evolution, science can tell us nothing about this aspect:

> "The sciences of observation describe and measure the multiple manifestations of life with increasing precision and correlate them with the time line. The moment of transition to the spiritual cannot be the object of this kind of observation, which nevertheless can discover at the experimental level a series of very valuable signs indicating what is specific to the human being. But the experience of metaphysical knowledge, of self-awareness and self-reflection, of moral conscience, freedom, or again of aesthetic and religious experience, falls within the competence of philosophical analysis and reflection, while theology brings out its ultimate meaning according to the Creator's plans."[208]

Consequently, objects of theological knowledge, such as the soul, are judged to be scientifically unstudiable, non empirical realities. In the above passage, John Paul II

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[207] MacIntyre, Alasdair. Dependant Rational Animals. (Chicago: Open Court, 1998). *Chapter Three: The Intelligence of Dolphins*, 21-28.

[208] John Paul II, "Message to the Pontifical Academy of Sciences," Evolutionary and Molecular Biology, eds. Robert John Russell, William R. Stoeger, S.J. and Francisco Ayala (Vatican City State: Vatican Observatory and Berkeley, Calif.: Center for Theology and the Natural Sciences, 1998), 2 – 9.

reassures his audience that the theological understanding of human nature is in no danger of being dismantled by any scientific discovery.

As God is Himself invisible and non empirical, then it seems reasonable to assert that the *breath of God* dwelling within the bodies of *Homines sapientes* is also invisible, and cannot be an object of study by any scientific discipline. Whatever one understands to be evidence of the *breath of God*, whether intellectual understanding or the ability to pray, both are really merely the fruits of divine life, external signs of its existence, and not that divine *breath* itself.

If it is the case that both scientific and theological kinds of knowledge are equally cultural and rational ways of interpreting the world, as van Huyssteen suggests,[209] then our understanding of the created world, divinity, and the overlap between the two we now understand as human nature must allow for both points of view to have something unique, yet valid to say about the world. If we accept the Christian understanding of the human being to be an animal given a unique kind of divine life, then it becomes clear which understanding of human nature and embodied divine life is the most acceptable. Even though Ruse makes every attempt to avoid the inevitable answer, preferring to remain a naturalist, only the Platonic-Augustinian acceptance of a combined physical and spiritual nature for humanity seems more compatible with Christian anthropology. The Platonic-Augustinian understanding that the soul is an entirely different substance from the body seems also to be more in harmony with the theological understanding of God as a communicating person. Understanding the soul as a specially and intentionally given

[209] van Huyssteen, J. Wentzel. Duet or Duel: Theology and Science in a Postmodern World. (Harrisburg: Trinity, 1998). 159-166.

gift makes it easier for us to understand God as a loving and generous Father than does understanding it to be an evolving pattern structuring biological material.

Ultimately, we have seen Ruse's attempt to reconcile a Thomistic understanding of human nature with a naturalistic Darwinian understanding of biological life meet its end in the face of difficulties which do not seem to be solvable. In light of these difficulties, it can be recognized how contrary Ruse's attempt is to the van Huyssteenian multidisciplinary approach to investigating and understanding any knowable phenomenon. While van Huyssteen sees no harm in allowing non-empirical realities to play a role in his explanations, Ruse seeks to avoid them whenever possible, and as a result is unsatisfied by any Platonic explanation that, while being easier to reconcile with Christianity, ultimately amounts to a dualistic account of human nature. However, the naturalistic account Ruse prefers leaves unanswered the problem of explaining the unique human nature Christianity believes separates human beings and other animals.

If one wishes to embrace a Christian anthropology while still accepting the fact of biological evolution, the most satisfaction seems only be found in an Augustinian understanding, even if it is not reductionist. Only with this view can we preserve the theological fact that God implanted a spiritual nature into an animal taken from "the dust of the earth", physical matter, in order to create a unique kind of being capable of living in His image. Van Huyssteen accepts from the very beginning that attempting to understand anything through the limits of a single discipline, whether limited to the empirical or non-empirical, will result in only limited knowledge. Overcoming his

discomfort and accepting an approach more similar to van Huyssteen's would allow Ruse to easily leap over the impasses blocking his way.

3.6. Conclusion. Ruse has been an important thinker for us to consider in this chapter, because he makes an explicit attempt to integrate into one single account both scientific and theological understandings of the origin of *Homo sapiens*. Ruse is especially interesting for us and this investigation, in that he attempts to make use of both science and theology in his explanation, rather than draw a line between separate domains of knowledge, as did Ratzinger. In this way, Ruse and van Huyssteen share the same goal, as both hope to reach a more complete understanding of human nature through the integration of both disciplines. Unfortunately, the viewpoints of Ruse and van Huyssteen part ways on the issue of reductionism; while van Huyssteen has no problem accepting multiple ways of understanding a phenomenon which are not ultimately reducible to one another, Ruse refuses to rest until he has found a single explanation that supports both viewpoints. In other words, while van Huyssteen respects the boundaries between disciplines, while nevertheless looking beyond them in order to gain further knowledge, Ruse seeks to eliminate all possible boundaries. Because of this, Ruse feels that the best way to incorporate theology and science when explaining human nature and origins is through an Aristotelian-Thomistic understanding of the soul. Unfortunately, this leads to making significant compromises with theological understandings of human nature.

The purpose of this chapter was to determine how *Homo sapiens* could be understood to exist in *imago Dei* in light of the fact of evolution and the overlapping cognitive capacities of some *Homines sapientes* and animals outside the *species Homo*

sapiens. My conclusion is that human nature belongs not to the *species Homo sapiens*, but to a particular family of *Homo sapiens* which nevertheless now includes every *Homines sapientes* alive today. Accepting this possibility in conjunction with a theological understanding that God extended His own divine nature into physical matter in order to create human beings leads to the understanding that God placed a human nature into an already existing species. Thus God employed the use of both physical and spiritual actions in order to bring human creatures into being.

While the strictly scientific description of the Mitochondrial Eve is fascinating all on its own, understanding the theological fact that the *Family Homo sapiens* now lives with the divine life of God inside it greatly enhances our understanding of human nature. At the same time, scientific discoveries can help us to better understand the reality being described by the author of Genesis, using empirical facts and a specific point in history to reveal how a spiritual truth manifested itself in a physical reality. If science is able to show us how to understand what theology tells us about the origins of human nature, especially through an interpretation that sees the story of Adam and Eve as less metaphorical than it is often assumed to be,[210] then the value of employing a multidisciplinary approach to human nature, such as that advocated by van Huyssteen, becomes more obvious.

The next chapter shall consider the implications which follow from this van Huyssteenian approach. If Rusian naturalism fails to offer a satisfying understanding of human nature and human origins, then we can accept a multidisciplinary understanding

[210] Though the Genesis story of humanity's first parents is now generally regarded to be a myth, the existence of the Mitochondrial Eve has allowed for a new kind of compromise between science and theology.

as the best means of gaining the most comprehensive understanding of human nature. The implications to be considered include accepting the presence of a spiritual substance alongside a physical one in the human being (dualism), as well as the question of how to classify other intelligent creatures if they are not human beings. Also addressed will be the question of whether intelligence is best understood as an aspect of divine life or of animal nature.

Chapter Four: Understanding the Human Soul.

The purpose of this chapter will be to examine the spiritual nature of human uniqueness. This shall be done by first elaborating the idea first put forth in the previous chapter that humanity's spiritual uniqueness is not the same as its intellectual uniqueness. Rather than understand intelligence as divine, as thinkers such as Plato and Aquinas once imagined, more contemporary thinkers such as van Huyssteen and Lonergan have instead suggested that loving relationships are a sign of Godly nature. The purpose of this chapter shall be to consider whether the understanding that the Aristotelian intellectual soul is really more an aspect of animal nature or of human nature. Also, it shall address the coexistence of both physical and spiritual substances in the human being, in light of the previous chapter's acceptance of a more Platonic understanding of the human soul. Therefore, the idea of dualism shall be addressed, as it is determined how closely Plato's understanding conforms to our present understanding.

4.1. The Status of the Intellectual Soul. This section shall examine the place of the Aristotelian idea of the intellectual soul, in light of the conclusion of the previous chapter. As the last two chapters discussed the idea that intelligence is not what allows a creature to exist in God's image, it must now be determined how intelligence relates to human nature. This shall be done in the following pages.

While discussing animal intelligence in The Dragons of Eden, Carl Sagan recounts an old story told by Plutarch and Pliny:

> "A dog, following the scent of its master, was observed to come to a triple fork in the road. It ran down the leftmost prong, sniffing; then stopped and returned to

> follow the middle prong for a short distance, again sniffing and then turning back. Finally, with no sniffing at all, it raced joyously down the right-hand prong of the forked road."[211]

While Sagan tells us that Michel de Montaigne argued that the story demonstrates a clear example of what he called "canine syllogistic reasoning",[212] Sagan tells us that Aquinas had a different interpretation:

> "St. Thomas Aquinas attempted unsuccessfully to deal with the story. He cited it as a cautionary example of how the appearance of intelligence can exist where no intelligence is in fact present. Aquinas did not, however, offer a satisfactory alternative explanation of the dog's behavior."[213]

For many thinkers and for many centuries, it was intelligence that was believed to serve as the mark of human uniqueness. Though they understood it to exist in different ways, it has been noted already how it was the belief of Plato, Aristotle, St. Augustine and St. Thomas Aquinas that an intellectual soul was what set human beings apart from other kinds of animals. This understanding continued to prevail for many more centuries, as thinkers such as Rene Descartes came to believe that a thinking substance served as the most undeniable aspect of human life.[214] Even Carl Sagan, who observes human nature from an entirely scientific point of view, is forced to concede that intelligence alone is the source of human uniqueness.[215] Also, through his attempt to describe the reconciliation of Catholic theology with Darwinism, Michael Ruse is forced to accept a Thomistic understanding of the human soul that describes a structure allowing for intelligent behavior.

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[211] Sagan, Carl. The Dragons of Eden: Speculations on the Evolution of Human Intelligence. (New York: Ballantine, 1985). 221.
[212] Ibid., 221.
[213] Ibid., 221.
[214] Descartes, René. Meditations on First Philosophy, trans. Donald A. Cress (Indianapolis: Hackett, 1993). *The Second Meditation*, 23.
[215] Sagan, Carl. The Dragons of Eden: Speculations on the Evolution of Human Intelligence. (New York: Ballantine, 1985). 81.

Problematically for Aquinas, and other theistic thinkers who identified the human soul with the intellect, examples demonstrating intelligence to exist in other animal species are numerous. They are also utterly reasonable, if we consider the close relation these other species share with *Homo sapiens*. As MacIntyre notes, attributing recognition, intentionality and communication to dolphins helps to satisfactorily explain their actions and behavior.[216] This understanding becomes especially reasonable if one considers the size of the dolphin brain in proportion to the body, as well as the complexity of the dolphin brain.[217]

As noted in the previous chapter, Michael Ruse poses an interesting question as he considers what it would mean for human life to emerge from non-human life. His words shall be more fully stated here, so that his idea might be reconsidered in light of our current discussion:

> "Of course, theologically you can insist that some pair [of ancestral *Homines sapientes*] did uniquely get immortal souls (miraculously), and there is an end to it. By fiat you can introduce all the intelligence you like into these souls. All else is contingent irrelevance. There were members of *Homo sapiens* before this pair and around this pair, but these others were not humans in the theological sense: that is, beings with immortal souls. But this stipulation is not without its difficulties, tensions certainly. Darwinian biology suggests that intelligence (and, as we shall see, related freedom and moral awareness) would be possessed by the parent generation and the contemporary generation and those of the next generations not descended from the pair. So on what basis can we declare them not to have been made in God's image?"[218]

Ruse is asking what ultimately prevents us from understanding all intelligent forms of life to be human, especially within the *species Homo sapiens*. While both the theist Stephen

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[216] MacIntyre, Alasdair. Dependant Rational Animals. (Chicago: Open Court, 1998) 21.
[217] Ibid., 81.
[218] Ruse, Michael. Can a Darwinian Be a Christian?: The Relationship Between Science and Religion. (Cambridge: Cambridge, 2001). 76.

R. L. Clark and the atheist Carl Sagan would each answer, "nothing!" and proceed to extend the boundaries of humanity to any other sufficiently intelligent creature, this is not so easily done for thinkers who do not wish to compromise their theological understanding of human nature.

This issue is addressed in a speculative essay by Dominican Thomas F. O'Meara. O'Meara considers the possible existence of intelligent extraterrestrial life in order to imagine the impact its discovery might have on Christian understandings of redemption. At one point in the essay, he considers the existence of beings who are intelligent but have no understanding of religious concepts nor any relationship with God:

> "Are beings on untold planets called to a special relationship with God, to a share in divine life beyond intelligence? The ways in which supernatural life touches sensate intellect and will, the modes of contact in revelation may be quite diverse, and it is a mistake to think that our understanding of 'covenant', the 'reign of God', 'redemption', or 'shared life' exhausts the modes by which divine power shares something of its infinite life. On the other hand, do another planet's intelligences find in their world natural life and no more? They may have in their psychological and biological energies no aspiration to life after death, no longing for fulfillment from beyond, and no special contact from God."[219]

Though O'Meara does not specifically say so, the imaginary beings he describes would not be considered human according to the understanding I have described over the course of this thesis, for they fail to both reach out from this world to connect with the supernatural, and to manifest the life of God in this world. If these creatures lack the spiritual aspect the *Family Homo sapiens* possesses, which allows for a religous life and makes an awareness of God possible, then we would be ultimately forced to conclude that such creatures are fully animal. This is because in spite of their intelligence, at no

[219] O'Meara, O.P., Thomas. "Christian Theology and Extraterrestrial Intelligent Life." *Theological Studies* 60 (1999) 23-24.

point in their evolutionary history was the living *breath of God* placed into any ancestral members of their kind.

Let us for the moment accept Ruse's observation (and criticism) that the first members of the *species Homo sapiens* we might call "theologically human" were very similar, if not nearly identical to both their own parents as well as other contemporary members of the species. Let us for the moment recognize that they resemble these other individuals very closely in both intelligence and moral awareness, as Ruse suggests. If we do, then we must wonder how we are to describe the first true humans as unique. To help us answer, van Huyssteen offers the suggestion that the historical "Adam and Eve"

> "were the first hominid group that in whatever form of religion or language used some form of expression that we might translate as 'God'. On this view Adam and Eve strikingly represent the first hominid group that by ritual action were embodied before God, and thus Christian theology is liberated from the obligation to anxiously stipulate morphological marks that distinguish prehumans from humans in the evolutionary succession."[220]

If we then understand that a supernatural, purely spiritual aspect is responsible for the *Family Homo sapiens*' existence in *imago Dei*, then we have explained the ontological difference that sets *Homo sapiens* apart from other hominid species. If we understand that the *breath of God*, a unique kind of spiritual substance, was placed into the distant but direct ancestors of all presently-surviving *Homines sapientes*, then we may understand it to serve as the source of the *Family's* unique, religious behavior.

If we understand God to be a non-empirical reality, then we may also come to accept the *breath of God* placed into the *species Homo sapiens* to be also non-empirical,

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[220] van Huyssteen, J. Wentzel. Duet or Duel: Theology and Science in a Postmodern World. (Harrisburg: Trinity, 1998) 146.

and purely an object of theological understanding. Understanding the *breath of God* as a spiritual substance placed into the physical body of the human being allows us to accept an understanding of the human soul closer to the Platonic-Augustinian conception described by Ruse. It allows us to understand that humanity exists wherever this substance exists, even if that substance provides no external signs signaling its presence. As a result, young, autistic or handicapped *Homines sapientes* could be described as human through the presence of the *breath of God* in their bodies, even if they fail to behave as other human beings do.

Biologically speaking, then, the differences marking the *species Homo sapiens* from other forms of animal life would prove to be only of degree, and not kind. The same would be true of the intelligence *Homo sapiens* possesses, if intelligence exists in other species of animal life. Anthropologically, however, the ability of most members of the *Family Homo sapiens* to exhibit religious behavior might be understood to set that population apart, if it serves as a sort of "sign post" testifying to the presence of a human soul in them. If we accept this, we must not make the mistake of considering this to be an infallible sign. This is because not all members of the species are capable of behaving in religious ways or understanding religious ideas. Nevertheless, the pervasive and undeniably significant presence of religion in the cultural life of *Homo sapiens* may offer the theistic investigator of human nature a strong reason to believe the *Family Homo sapiens* is theologically unique. The *breath of God*, though not an empirical substance, may be understood to manifest itself in the cultural lives of the creatures it resides within.

Understanding that the members of the *Family Homo sapiens* are human beings because they possess a divine substance in their bodies allows us to defend the humanity of any form of life descended from the original possessors of this substance. As a result, we can recognize the source of true humanity to be more than a mere creation of God, but the very *life of God Himself.*

4.2. A Return to Dualism. It is my hope that the arguments and speculations of the previous chapter and section were able to provide a convincing response to the question of why, in light of a theological awareness of the divine life in an embodied creature, human nature must be denied to all organisms not descended from the first bearers of this ontological distinction. At the same time, it is my hope that these arguments have offered a reasonable explanation of why a distinctly human nature might still be understood to exist within all *Homines sapientes* currently inhabiting the planet earth, regardless of their intelligence or maturity. The following section shall recognize that understanding a spiritual substance to coexist with a physical body results in a *dualistic* understanding of human nature. The purpose of this section shall be to determine the exact nature of this dualism, in order to set it apart from traditional understandings of mind-body dualism such as the one described by Descartes.

If it is the case that the human being is determined by the presence of an unobservable spiritual aspect dwelling within a physical, biological body, then we seem to have returned to the largely abandoned notion of a dualistic human nature in which material and spiritual aspects jointly compose a single reality. Yet this nevertheless is not the dualism of mind and body held by Plato or Descartes, for the intellect (or mind) is in

this view not understood to be separate from the body. More than this, intellect (or mind) is not to be understood to be an exclusive attribute of the *species Homo sapiens*, if intelligent behavior is to be observed in other animals such as orang-utans and dolphins. Otherwise, one must hold to the notion that any conscious creature is in possession of a divine substance existing entirely apart from the body (a notion which, however, both Clark and Plato would appear to accept).

On the other hand, anyone claiming that an intelligent, human nature might only be found in the *species Homo sapiens* would be forced to deny that intelligence exists in any species that is not *Homo sapiens*. This would have to be done even when confronted with possible evidence that intelligence in fact exists in other animal species, as has been done by Aquinas, Descartes, and Malebranche.[221]

Thus the Aristotelian understanding that an animal's mind arises from the unity of an intellectual soul and a material body, allows us to understand that an animal's mind is ultimately inseparable from its body.[222] As a result, it is not the "non-bodily half" of the dualism I am describing. To elaborate from Michael Ruse,

> "For Aristotle/Aquinas, the human soul - identified with the intellectual faculty, which makes a human being a living human being - is not a thing, in the sense of a material substance. It is rather much more a principle of ordering or what, in

[221] Kortlandt, Adriaan. "Spirits Dressed in Furs?." The Great Ape Project: Equality Beyond Humanity, eds. Paola Cavalieri and Peter Singer. (New York: St. Martin's Press, 1993) 138.

[222] *Further details about the identification of the mind with the soul, as well as the question of whether the mind can exist independently of the brain, can be found in the following sources:*

Watson, Richard A., "Ghost in the Machine Fights the Last Battle for the Human Soul". *Kriterion: Revista-de-Filosofia*, 37.94 (1996): 55-63.;

Flanagan, Owen, The Problem of the Soul: Two Visions of Mind and How to Reconcile Them. (Reading: Perseus Books, 2002).

> Aristotelian terms, is called the 'form'. It is something real and can act as a kind of cause - Aquinas speaks of 'actuating', but it is not a substance. 'Any particular body that is alive, or even indeed a source of life, is so from being a body of such-and-such a kind. Now whatever is actually such, as distinct from not-such, has this from some principle which we call its actuating principle. Therefore a soul, as the primary principle of life, is not a body but that which actuates a body' ."[223]

Ruse, we see, understands the Aristotelian intellectual form to be a sort of "information bearing pattern" that determines the living body which it actualizes. This view, he acknowledges, may be understood to be reconcilable with a naturalistic, Darwinian understanding of an intelligent, animal nature:

> "I do not find this coincidence surprising. Aristotle was not just a philosopher, but a biologist - and a good one. He was also someone whose philosophy was 'naturalistic' in the sense that he tried to base his philosophy on the empirical facts as he saw them. His notion of soul was not intended to be airy-fairy or ethereal, but something which makes sense of things as we find them. This is the Darwinian position also."[224]

So it might be possible to embrace, even from a purely scientific perspective, the Aristotelian-Thomistic understanding of the intellectual soul. This is possible because the intellectual soul is not understood to be supernatural or divine; rather, it evolved naturally as an aspect of biological life. If we do accept this idea, however, we must also recognize that it is not the intellectual soul that makes an animal a human being. If we understand that science can never grasp the unique spiritual substance present in the *Family Homo sapiens*, then we may acknowledge that there is more to human nature than the possession of a body capable of both thought and the ability to gain knowledge. This is especially obvious if we understand that the reality which human animals exist in the image of, God, is not primarily understood to be intelligent, but loving.

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[223] Ruse, Michael. Can a Darwinian Be a Christian?: The Relationship Between Science and Religion. (Cambridge: Cambridge, 2001) 80.
[224] Ibid., 81.

4.3. Love. This section shall reflect on the loving natures of God and humanity. It shall be recognized that if God is loving and human beings were created to imitate God, then human beings were created to love as God loves. More than this, if God is to be identified *as* Love, as Christian theology teaches, and if the living breath of God dwells within human beings on earth, then it follows that human beings are actually composed of the love of God.

As Bernard Lonergan notes, the *Family Homo sapiens* was aware of the love of God long before any of its individual members reflected on the existence of an Unmoved Mover, or any other purely intellectual conception of God:

> "The vast majority of mankind have been religious. One cannot claim that their religion has been based on some philosophy of God. One can easily argue that their religious concern arose out of their religious experience. In that case the basic question of God is the fourth question that arises out of religious experience. It is only in the climate of a philosophically differentiated culture that there occurs reflection on our questions for intelligence, our questions for reflection, and our questions for deliberation."[225]

Thus God was always encountered first in terms of loving relationships, not in an awareness of a mind.[226] It was this divine Lover humanity sought to relate to through the rituals and religions it developed. If this is Who God is, then human beings most

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[225] Lonergan, Bernard. Philosophy of God and Theology. (Philadelphia: Westminister, 1973) 55.

[226] *An interesting investigation into an understanding of human personhood in relation to God that is similar to Lonergan's can be found in the following article, which also considers the identification of the mind with the soul:*

Oomen, Palmyre M. F., "On Brain, Soul, Self, and Freedom: An Essay in Bridging Neuroscience and Faith." *Zygon: Journal of Religion & Science,* 38.2 (June 2003): 377-392.

especially live in imitation of God when they act out of love for one another.[227] Thus this is the image of God, for God loves.

In the earliest centuries of Christianity, St. John the Evangelist not only described God as Love, but went on to describe the loving relationship shared between Jesus Christ and God the Father. He did this by stating in his gospel that Christ manifests His love for the Father through His obedience to Him, while the Father reveals His love for the world through the life and death of Christ.[228] Christ's command for His followers,"love one another as I have loved you" offers all human beings an opportunity to emulate God in their earthly lives.[229] Returning to more recent times and more contemporary thinkers, we see the same understanding of God being described and the same ideas being expressed through writers such as Bernard Lonergan and Joseph Ratzinger. After becoming Pope Benedict XVI, Ratzinger noted that St. John was the only New Testament writer to define God, Whom he describes on three separate occasions as "spirit", "light", and "love":[230]

> "By so doing, John wants to say that the essential constituent of God is love and hence, that all God's activity is born from love and impressed with love: all that God does, he does out of love and with love, even if we are not always immediately able to understand that this is love, true love. At this point, however, it is indispensable to take another step and explain that God has concretely demonstrated his love by entering human history through the Person of Jesus Christ, incarnate, dead and risen for us. [...] Those words of Jesus, 'as I have loved you', simultaneously invite and disturb us; they are a Christological goal that can appear unattainable, but at the same time they are an incentive that does not allow us to ensconce ourselves in what we have been able to achieve. It does

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[227] Ibid., 58.
[228] Kee, Howard Clark, and Franklin W. Young. The Living World of the New Testament. (London: Darton, Longman, and Todd, 1960) 408-409.
[229] Ibid., 408.
[230] Benedict XVI, "John, the Theologian." L'Osservatore *Romano Weekly Edition in English* (23 August, 2006) 10.

> not permit us to be content with what we are but spurs us to keep advancing towards this goal. "[231]

The New Testament understanding of God as both a Lover and as Love itself (Himself), one reiterated by Christian theologians up until the present day, not only offers us an understanding of Who God is and what God does, but also tells us how human beings are to act if they are to live in imitation of God.

And so we can understand, through considering science and theology together, that though the body is a product of evolution, the spiritual aspect of human animals is not. Rather, it is a gift from God, originating from beyond this world. As the receivers of this gift, human beings bear an ontological distinction from other animal species, for they are not wholly products of evolution. The supernatural substance that makes the *Family Homo sapiens* human is itself invisible, though it reveals its presence within the species through familial love and religious relationships, as Lonergan stated. Through such actions, the divine reality of God breaks into the material world, and finds life there. Human beings, then, might be understood to be embodiments of Love in the world. Their communities are extensions of this love, both reflecting the divine community of the Trinity and ensuring the survival of the bodies holding that love.

At this point, we must recognize that the understandings of what it means to live in *imago Dei* offered by van Huyssteen, Ratzinger, and MacIntyre converge, together with Lonergan's understanding of a loving and relational God. A brief quotation from each shall demonstrate their shared understandings of human nature.

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[231] Ibid., 10.

MacIntyre: "[I]n order to flourish, we need both those virtues that enable us to function as independent and accountable practical reasoners and those virtues that enable us to acknowledge the nature and extent of our dependence on others."[232]

Ratzinger: "Human beings are relational, and they possess their lives – themselves – only by way of relationship. I alone am not myself, but only in and with you am I myself. To be truly a human being means to be related in love, to be *of* and *for*."[233]

Van Huyssteen: "The idea [of *imago Dei*] is also seen in the broader context of the imitation of God, the *imitatio Dei*. Here the knowledge that we are created in God's image brings with it the obligation to show oneself worthy of God's love by acting in accordance with that love."[234]

Lonergan: "If persons are the products of community, if the strongest and the best of communities is based on love, then religious experience and the emergence of personality go hand in hand."[235]

As we consider each quotation, in light of the understandings of human nature and God each has brought to this discussion, we recognize that several different but complimentary perspectives are being offered. MacIntyre, who is not a theologian, does not invoke any divine commandments or note an existence in *imago Dei* for human beings, but only attempts to describe a successfully surviving community of individuals. Ratzinger calls human beings to embrace God's commandment and love one another, while acknowledging how much each human being is in need of love. Ratzinger notes that through loving our neighbors as ourselves, we transcend our limitations and become more actively like God. Van Huyssteen stresses the embodied nature of the human being as the means through which a life lived in imitation of God is possible. Lonergan, finally, offers a more theological account of what MacIntyre describes, singling out love

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[232] MacIntyre, Alasdair. Dependant Rational Animals. (Chicago: Open Court, 1998) 155-6.
[233] Ratzinger, Joseph. In the Beginning: A Catholic Understanding of the Story of Creation and the Fall, trans. Boniface Ramsey (Grand Rapids: Eerdmanns. 1995) 72.
[234] van Huyssteen, J. Wentzel. Duet or Duel: Theology and Science in a Postmodern World. (Harrisburg: Trinity, 1998) 293.
[235] Lonergan, Bernard. Philosophy of God and Theology. (Philadelphia: Westminister, 1973) 59.

as the heart of the community, and acknowledging the love of God as the source of humankind's loving relationships.

In each, the importance of living for others is stressed, for both practical and spiritual reasons. One of these is the survival of the community, which is assured if all abandon selfish behavior and work for the good and protection of one another. A second is the love of God, as loving others as God loves them invites the love of God to come more completely inot the world. A third is because a life lived loving others is natural for us, for human persons were created to imitate in their family relationships the love of the Divine Family, the Trinity. It was out of this eternal context of Love that the world emerged, and it is this love that human animals evolved to participate in.

4.4. Conclusion. It has been shown that ultimately it is possible to understand both an Augustinian ontological dualism and a Thomistic intellectual soul simultaneously present in a human being. However, before we do this, we must divorce from our understanding of the Thomistic rational soul any belief that its possession allows for an existence in *imago Dei*. At the same time, we must not make the mistake of understanding the spiritual substance of the human being to be an intellectual soul, but instead as the very *breath and life of God*. By making these qualifications to both St. Augustine's and St. Thomas's ideas of the human soul, we have found an understanding that is free from the problems posed by explaining human nature through reductionistic Darwinian theory, recognizing the animal nature of *Homo sapiens*, and demonstrations of intelligent behavior in other animal species besides *Homo sapiens*. We have also found a description that reminds us that if God is Himself Love itself, as Christian theologians

such as Bernard Lonergan tells us, and if *Homo sapiens* carry within their bodies the life and love of God, then *Homo sapiens* carries the life of God into the world. More than this, through the loving relationships of its members, the species extends the love and life of God all across the world.

The ideas of MacIntyre, Ratzinger, van Huyssteen, and Lonergan, considered in the preceding section describe the body as the means through which relations of love are carried out. The theologians of the group, meanwhile, go further in order to identify the love of God coming into the world through these relations. The dualistic understanding of the human being recognized in this chapter might then be understood to be a sort of atomic component in a greater embodiment of God, which is realized through the loving actions of its individual parts. Thus the bodies of the entire human species are capable of uniting into a single communion of love, which allows God to live more fully in the world.

Chapter Five – Conclusion and Reflections.

5.1. Summary of the Past Four Chapters. The purpose of this thesis was to understand the essence of human nature, especially theistic conceptions, in light of the scientific facts of evolution and the animal nature of the beings most typically regarded as human. Examining a more comprehensive study of humanity allows us to better understand the grounds on which theists assert that *Homo sapiens* is a uniquely human species, even in spite of the fact that its members are descended from non-human creatures, and that its kindred species sharing many of the same evolutionary ancestors lack humanity.

In the first chapter I discussed and demonstrated how in different disciplines of study and knowledge, *humanity* has different meanings and is determined by different facts. As a result of these differences, humanity has come to be both understood and determined in different ways by several different points of view. The overlapping nature of some of these understandings show us that at least some understandings of human nature can be related. These overlaps allow different perspectives of human nature to share some facts in common, even though each emphasizes different readings of those facts. Consider, for example, the ethical understanding of humanity developed by MacIntyre, together with the theological description provided by Ratzinger. While Ratzinger emphasizes the divine life inhabiting the biological body of an animal as the most important aspect of human nature, MacIntyre considers the dependant vulnerability of the biological body to be humanity's most definitive aspect. Nevertheless, for Ratzinger, the social existence of humanity is fundamental to either view, as it allows for

human life to emulate divine life. Meanwhile, however, MacIntyre sees community life as the means through which the successful survival of the human species is assured. Because different disciplines of study are capable of differently understanding the same realty, incorporating multiple understandings of human nature into one ultimate multidisciplinary understanding can offer the most complete understanding. This is the approach defended by van Huyssteen.

However, this technique will only succeed if one is willing to consider disciplines such as science, ethics, and theology to be equally valid—yet incomplete--means of attaining different kinds of knowledge. If the considerer is open, then the understanding of human nature he or she gains when employing such a method can be defended as the most complete. This is because it is not limited by any of the restrictions that prevent subjects such as physical science from commenting on the ethical or religious truths found in ethics or theology. Only when one has a more complete understanding of human nature, as a result of a multidisciplinary investigation, can one attempt to defend the uniqueness of humanity in an evolving world and in light of *Homo sapiens*' biological nature.

I began the second chapter by considering scientific challenges of human uniqueness brought to light by the fact of evolution and the animal nature of human beings. I also discussed the close ancestral relation that forces us to acknowledge *Homo sapiens* as a kind of ape together with other apes which are typically not considered to be human. Because such essentially human characteristics as intelligence and language can be observed to be present in other animal species, we have been given an opportunity to

consider whether other animal species might be human too, just as Clark does. As a result, I discussed Clark's claim that *Homo sapiens* must share its status as *imago Dei* with countless other species of animal. Unfortunately, I noted, this is of course incompatible with the theological understanding that God implanted an aspect of His divine life into a single family of earthly creatures. If we accept the validity of theologically-based knowledge, then it appears that intellect and language are not after all signs of divinity, as Clark claims, but are simply aspects of evolved animal nature.

I then considered van Huyssteen's claim that a capacity for religious rituals, religious experience, and the ability to have a relationship with God is not only unique to *Homo sapiens*, but also allows the species to live in imitation of God. This idea was supported by discussing Lonergan's theological understanding that God is most primarily revealed to us as a loving person. This capacity for religious behavior and an awareness of divinity might allow us to recognize the uniqueness that makes *Homo sapiens* a human species.

In the third chapter, I noted that all *Homines sapientes* share a single common ancestor, and are as a result all the members of a single family. Recognizing this is important, for it allows us to understand that *Homo sapiens* possesses a biological distinction that sets it scientifically apart from all other related species of primate. I also discussed the theological claim that *Homo sapiens* alone possesses a divine spiritual substance as a part of its being. I discussed how the possession of this substance sets it apart from all other forms of animal life, including the species' closest relatives. Through noting the extremely close relationship all *Homines sapientes* genetically share, I stated

that it is reasonable to accept mentally handicapped and disabled *Homines sapientes* as human. However, attempting to prove the handicapped and others to be fully human through the use of biology alone does not lead to a satisfying empirical proof of their humanity, family relations aside. Recognizing the limits of science in this matter, the third chapter acknowledges the turn that must be made to theological understandings of human nature, which are capable of asserting a non-empirical aspect that defines human nature.

In the fourth chapter I acknowledged the dualism one must commit to if one accepts theological notions of human nature to be valid. I confirmed the understanding that such attributes as intelligence and language are indeed simply aspects of animal nature. This prompts a new understanding of human dualism not as a unity of a mind and a body, but instead as the unity of a spiritual substance with a biological one. In light of this fact, an attempt was made to consider the nature of other forms of intelligent life, if they lack the invisible theological element that makes biological animal life human in the *Family Homo sapiens*.

Ultimately, I conclude, it is this dualistic union of divine and animal life which together comprise the human being. The spiritual substance residing in the animal body of the species *Homo sapiens* is what makes it a human species, and sets it apart from all other forms of life in the world. Recognizing this allows us to continue to assert the animal nature of *Homo sapiens*, together with the understanding that the species arose through a process of biological evolution. This allows us to recognize that attributes such as intelligence or language use are not restricted to *Homo sapiens* alone, and may have

evolved to exist in other species, even if to lesser degrees. Also, understanding that a spiritual substance (which theology describes as the *breath of God*) came to reside in the ancestors of *Homo sapiens*, allows us to recognize an ontological distinction that makes the species unlike any other. Understanding the *breath of God* to be the very life of God allows us to recognize that through the *Family Homo sapiens*, God has overcome the restrictions of physical existence in order to enter into the world, Himself. Using both science and theology together to understand human nature allows us to assert both *Homo sapiens*' animal and divine existences simultaneously.

I shall end this summary with a brief recapitulation of the ideas offered by the thinkers considered in this thesis, together with the purpose each thinker's ideas served. Near the end of Chapter Four, I noted the relationship of the understandings of human nature described by MacIntyre, Ratzinger, van Huyssteen, and Lonergan. Simply put, each recognizes the necessity of the community for the survival of human life. However, the theologians of the group go beyond practical, this-worldly motivations such as survival, in order to offer God as the reason why human beings live in loving relationships. Yet while Ratzinger and van Huyssteen cite Jesus's commandment to love one another as humanity's reason to live in the image of God, Lonergan goes beyond it, citing the loving relationship within God Himself as the source of humanity's identity, and the reason why human beings live in loving communities. Simply, human beings were never intended to do anything else, or live in any other way. Accepting and employing van Huyssteen's multidisciplinary method of investigation allowed us to incorporate each of these perspectives of human nature into a single, more

comprehensive perspective, which allowed us to embrace a more complete understanding of human nature.

Sagan's understanding also served to underlie the multidisciplinary view advocated by van Huyssteen, who was open to scientific understandings of human uniqueness as well as theological understandings, by explaining human life in purely biological terms. At the same time, both MacIntyre's ethical and and van Huyssteen's multidisciplinary understandings embrace the physical, embodied understanding which Sagan describes. This is because the fragility and vulnerability resulting from a biological existence serve as the reason why caring communities are the best way to ensure the survival of the species. This supports van Huyssteen's observation that to exist in *imago Dei* is to exist in *imitatio Dei*.

The thought of Clark, on the other hand, was included largely to demonstrate the folly of attempting to use a biological understanding of *Homo sapiens* to demonstrate human uniqueness. This is because the aspect that sets human beings apart from other forms of animal life is not an object of scientific investigation. As a result, neither biology nor attributes such as intelligence or language use can be shown to make *Homo sapiens* a unique species. This is because such attributes are not unique to other animal species, as was demonstrated by both MacIntyre and Miles.

Ruse's purpose was similar to Clark's; while attempting to pull down the barriers between such disciplines as science and theology, contrary to van Huyssteen's multidisciplinary method of investigation, he demonstrated that a purely naturalistic, scientific understanding could never show *Homo sapiens* to be a unique species on its

own. By attempting to explain *Homo sapiens*' theologically understood uniqueness through Darwinian reductionism, Ruse was forced to compromise his theological understanding. As a result, Ruse demonstrates the value of accepting a multidisciplinary understanding of human nature: it allows us to understand the *Family Homo sapiens* to be truly unique and a product of divine creation, while at the same time accepting and embracing the species' evolving, biological nature.

5.2. Reflection. The first chapter of this thesis quoted a remark from Ratzinger that forces us to confront the ultimate nature of humanity, and what being human really means:

> "Indeed, to the question as to what distinguishes the human being from an animal, as to what is specifically different about human beings, the answer has to be that they are the beings that God made capable of thinking and praying. They are most profoundly themselves when they discover their relation to their Creator."[236]

It is the understanding of Ratzinger, then, that *Homo sapiens* is a unique species because it was made by God to exist in a relationship with Him, and is aware of His existence in a way like no other animal species.

MacIntyre emphasizes the necessity of communal relations within the human family as humanity's ethically most fundamental aspect, while Ratzinger, Lonergan, and van Huyssteen theologically orient this aspect as the means through which humankind lives in imitation of God. One idea we might take from these connected observations is that to be human, one must be like God. Likeness to God is the basis of human nature,

[236] Ratzinger, Joseph. In the Beginning: A Catholic Understanding of the Story of Creation and the Fall, trans. Boniface Ramsey (Grand Rapids: Eerdmanns. 1995) 48.

both Ratzinger and van Huyssteen tell us, and it is through their loving relationships that human beings take part in God's loving nature.

Theology also tells us that our resemblance to God is rooted in a supernatural aspect placed in an animal organism by an historical act of God. As a result of this theological fact, we cannot accept either Ruse's version of traducianism, which describes the human soul evolving from a more primitive human soul, or any sort of notion that human uniqueness can be completely explained away as a result of evolution. Theological understandings, therefore, must not be compromised or determined by scientific understandings, or else they will cease to be purely theological understandings. Put simply, we might understand that while animals do not evolve into God, God placed His own spirit into animal life. Thus, theology and biology are both necessary if we are to fully understand earthly human nature.

The divine part of the universe that is human existence did not naturally arise out of the evolution of intelligent animal life, but rather appeared supernaturally through an act of God upon the world. If we accept this theological fact, we must reject Clark's understanding that the whole universe has begun to reach a divine sort of existence through a natural process of evolution. If we reject Clark's understanding, then we have no choice but to recognize the divinity that exists at the heart of humanity. But if we recognize that human life exists in *imitatio Dei*, we may retain at least one important observation made by Clark: the idea that the earthly divine life found in the human family is derivative of a greater divine life, and that the greater divine life of God is divinity in a

more perfect (and in the most perfect) form. Human life is not of the earth and thus is nowhere to be found if we attempt to find it using science alone.

It follows from this (as Clark notes) that human life *is* divine life. The two are identical; they are one and the same. It is not the possession of intelligence that makes *Homo sapiens* divine, as Clark believes, but the species' unique capacity for loving, religious relationships, as Lonergan describes. The human community as it exists on earth is a reflection of the communion of God both within Himself (in the persons of the Trinity) and His Creation, for the relations which exist within each are the same. If God is a greater state of divine existence than that which is found in the animal life on earth, then God also exists in a greater state of humanity.

God is, therefore, the most human person in existence. God is also the original human being, and was human before the *species Homo sapiens* ever evolved. The mortal humanity of the *Family Homo sapiens*, then, is derivative of the eternal humanity of God.

In light of this realization some of us might see *Homo sapiens* to be a species of crippled divinity, alive through their each being a part of the greater divine spirit, yet separated from the whole of it. While God is complete in His communion within the persons of the Trinity, individual human beings are incomplete and singular in their separation from their source. This idea comes primarily from MacIntyre, and his understanding that humanity's animal nature makes human life on earth both vulnerable and in need of caring relationships. Yet through MacIntyre's understanding of human nature, we could understand animal vulnerability to be the crutch that allows a limited divinity to become complete in the context of a loving community.

The body, as a result, becomes essential to earthly humanity for an entirely different reason than Aristotle and Aquinas understood. As the spiritual nature of God, which is divine *and* human, exists without a physical body, then the body cannot be understood as a necessary means for spiritual existence, as Aristotle and Aquinas both asserted. Instead, the body serves with all its limitations as a means for the separated human spirit to become whole again. As loving relationships within the earthly family and community tie earthly human lives together and ensure both the survival and happiness of all, as MacIntyre describes, the relational nature of God reveals itself on earth as the spirit of God is reunited.

5.3. Implications of this Reflection: A Better Understanding of "Humanity". This new understanding of humanity forces us to revise some of our uses of the word "human" in ordinary language, for they may sometimes be misleading. Too many times the word "human" has been used to describe not the divine and otherworldly aspect of the biological creatures existing in *imago Dei*, but really the worldly, animal nature such organisms possess. In order to illustrate, I shall present the following quotation:

> "The dual substance of Christ—the yearning, so human, so superhuman, of man to attain God ... has always been a deep inscrutable mystery to me. My principle anguish and source of all my joys and sorrows from my youth onward has been this incessant, merciless battle between the spirit and the flesh .. and my soul is the arena where these two armies have clashed and met."[237]

While author Nikos Kazantzakis's novel, The Last Temptation, was written with the intention of presenting Jesus' struggle against the temptations and desires of His earthly body, in spite of His divine nature, it has been described as a chronicle of the struggle

[237] Kazantzakis, Nikos. The Last Temptation. (1951; New York: Simon & Schuster, 1960) 1.

between His humanity and divinity.[238] Of course, if humanity and divinity are in fact one and the same thing, such a struggle would seem impossible. Kazantzakis' book, then, could be more accurately described as a presentation of Jesus' struggle between His divine and animal (that is, His *human* and animal) natures. The Jesus presented in the novel, as well as the Jesus believed in by Christians throughout history, was still understood to be, "at once complete in his divinity and complete in his humanity, true God and true man",[239] as described by the Ecumenical Council of Chalcedon in A.D. 451. This clearer understanding of what the term "human" means forces us to acknowledge that Jesus's weaknesses lay not in His human, but instead in His animal, nature.

In the same way, the consoling phrase "you're only human", used to reassure individuals facing weakness or limitations, is misleading. To say, "you're only an animal" offers a more accurate description of the reason why *Homines sapientes* are unable to live in states of perfect divinity and humanity. Of course, contemporary cultural understandings of the both animal nature and the nature of *Homo sapiens* would result in this more accurate phrase coming across as cruel and demeaning, if spoken. Only the adoption of an attitude that recognized the similar nature of other animal species and an honest recognition of *Homo sapiens*' own biological nature would remove the sting of such a remark.

I shall conclude this section with a quotation that almost perfectly sums up my understanding of divine life and of loving human relationships as one and the same. The words have been taken from a sermon preached by the Salvadorian Jesuit Rutilio Grande,

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[238] Snee, Brian J. "The Spirit and the Flesh: The Rhetorical Nature of The Last Temptation of Christ." *Journal of Media and Religion,* 4 (1,1999): 47-50.
[239] Hill, Jonathon. The History of Christian Thought. (Oxford: Lion Hudson, 2003) 93-94.

who was later murdered for his efforts to liberate the peasants enslaved by the wealthy landowners of El Salvador.

> "The code of the Kingdom of God is love, and the key word which sums up all the ethical codes of humanity: love, without boundary lines, exalted and offered in Jesus. It is the love of brothers, which breaks down every sort of barrier and boundary and which must overcome hatred itself. We do not hate anyone; we love even these Cains [the landowners]. The Christian has no enemies, even these Cains. Even they are our brothers. But their contradiction of love creates moral violence which violates us and violates society. And yet the very violence they create unites us and brings us together even though they beat us down, because we bring love against their anti-love, against sin, injustice, the enslavement of mankind and the destruction of our brotherhood by our brother Cains."[240]

In the terms I have been using over the course of this thesis, I would say that Rutilio Grande understood greed and violence to be products of *Homo sapiens*' animal nature, the results of biological limitation. Only the love of God, found in *Homo sapiens*' human nature, is capable of overcoming the species' animal weakness. Through the communities he helped establish among the peasants of El Salvador, Grande brought God to the poor in a way the missionaries who had first brought them Christianity never had.[241]

5.4. Implications of this Reflection: The Vulnerability of God. Our examination of all the various topics covered over the course of the preceding four chapters have firmly impressed upon us the fact of human vulnerability. We have come to recognize the helplessness of the individual members of the *Family Homo sapiens*, while understanding also that the life of God nevertheless dwells within those members. We have come to

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[240] O'Malley, S.J., William J. The Voice of Blood: Five Christian Martyrs of Our Time. (Maryknoll: Orbis, 1980) 43.

[241] Ibid., 33. *The author notes that since most of the peasants were illiterate, they had no opportunity to either read the bible or study their faith. As a result, he says,* "they had been merely baptized and in no real sense 'evangelized'".

understand this even in spite of the species' animal weaknesses and limitations. We can see how communal relations and acts of love within a family allow not only for an overcoming of such mortal limitations, but also how they allow the life of God to enter into the world and survive there. Recognizing this last fact forces us to confront another remarkable truth: the vulnerability of God Himself. God has placed Himself at the mercy of both *Homo sapiens* and the very world which He created. As a result of this, the *Family Homo sapiens* has been granted an opportunity to protect and care for its own Creator.

Though it seems impossible, the existence of God's life within a species of animal means that the life of God can live in the world only if those capable of doing so take Him under their care and protect Him. Recognizing God in every individual *Homines sapientes*, especially in the smallest and weakest among them, force us to realize that when we care for a small baby or the sick, the handicapped, or the elderly, we care for God.

This idea is central to Christian theology; one has only to recall the story of the Judgement from St. Matthew's Gospel:

> *"Then the righteous will answer him, 'Lord, when was it that we saw you hungry and gave you food, or thirsty and gave you something to drink? And when was it that we saw you a stranger and welcomed you, or naked and gave you clothing? And when was it that we saw you sick or in prison and visited you?' And the king will answer them, 'Truly I tell you, just as you did it to one of the least of these who are my brothers, you did it to me."* Matthew 25:37-40 (NRSV)

This means that through our care and compassion, we allow God to flourish, and provide God with further opportunities to extend His love as we care for the smallest and most

helpless forms He takes before us. However, if we fail to care for the most vulnerable members of our family and species, and live only for ourselves, we deny God opportunities to live in the world.

Roman Catholics should note the care and reverence their priests wield when handling the Eucharist, the bread which they transform into the body of Jesus Christ.[242] Thin and fragile, the Body of Christ in this form is easily broken, and could never withstand long exposure to the elements. Because both the Eucharist, as it is Jesus Himself, and the *Family Homo sapiens* are human beings, and because both are vulnerable to the elements of the world, both require (and are in turn capable of providing) the necessary protection, love, and attention for the preservation of each. One finds its protection in the building of the church, the other finds its protection in its home and family.

5.5. A Final Summary. To conclude at last, I wish simply to state the following points reached as a result of this investigation. These points not only demonstrate how human beings are unique, but also summarize the implications of that uniqueness.

First, it is possible to describe the entire animal species, *Homo sapiens*, as human. This is because the surviving members of this species bear an ontological difference that sets them apart from other animal species. The presence of this ontological difference, a divine substance which Genesis refers to as the *breath of God*, means that the members of the *Family Homo sapiens* are not and have never been wholly products of evolution.

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[242] Catechism of the Catholic Church. (Ottawa: Canadian Conference of Catholic Bishops) 1378.

They bear the life of God within themselves. Through the *Family Homo sapiens*, God comes to live in the world.

Second, it has been shown that human beings are both animal and divine. Each aspect of the human creature lies in the domain of a separate discipline of study. The body and the animal nature of the human being may be studied and explained with the help of biological science, but the divine spiritual aspect of the human being can only be known and understood through theological knowledge. At a certain point in time, theology tells us, a divine substance took root in the animal bodies of *Homines sapientes*, a gift from God that allowed them to exist in His image.

Third, it has been shown that while attributes and abilities possessed by most human beings, such as language, symbolic communication, and ritual behavior, seem to set them apart, none of these can be used on its own to prove the uniqueness of the human creature. This is because both language and symbolic communication have been demonstrated to exist in other forms of animal life, and because not all human *Homines sapientes* demonstrate an ability to use rituals or to behave religiously (the autistic or the mentally handicapped, for example). Ultimately, the spiritual substance responsible for *Homo sapiens*' humanity is a non-empirical reality, and as a result cannot be scientifically proven.

Fourth, though it does not allow for definitive proof of the species' humanity, religious behavior and rituals nevertheless serve as signs testifying to the presence of divine life in *Homo sapiens*. This is because a capacity for religious behavior and experience allows for humanity to establish communication with God.

Fifth, if we understand God to be loving and relational, then we can understand earthly humanity to exist in the image of God through its ability to have loving relationships with God and with itself. Human beings imitate God by loving one another and by together loving God. Those who are ill or handicapped, who are not capable of extending the love of God to others, are nevertheless both deserving and in need of the love and care of others, for they nevertheless carry the life of God within themselves.

Sixth, as a result of this, God comes into the world profoundly vulnerable and in need of care. While God as the Creator of the Universe is all-powerful, God as a creature in the universe is powerless. If God is to survive in the world, then He will do so at the mercy of His creatures and His creation.

Seventh, when we feed the hungry, comfort the lonely, or care for the poor, the sick, or the helpless, we do all these things for God. As God created us because He loves us, we owe God all the love we are capable of extending to Him, both in heaven and here on earth.

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